Essays on Fiscal Policy Implementation and Governance: Evidence from sub-Saharan Africa (SSA)

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Declaration

By submitting this dissertation, I, **Sabastine Akongwale**, declare that the entirety of the work contained therein is my own, original work, that I am the owner of the copyright thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Sabastine Akongwale March 2020

Dedication

With profound gratitude to Almighty God, whose mercies and graces brought me thus far in life's race, I dedicate this work to the following:

- My late mother, Mrs Jacinta Akongwale (née Adugba) who, though not literate, her inestimable sacrifices and passion for our education serve as motivation in all my endeavours. May God continue to grant you a blissful rest (Amen).
- My loving wife Mrs Beatrice Musa Akongwale and my loving children: Arianna, Antoine and Antoinette, for your enduring sacrifices and understanding. I love you all.

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Abstract

Despite the adoption of national and supranational fiscal rules, fiscal policy performance or fiscal outcome in sub-Saharan Africa (SSA) has been very poor, especially in terms of persistent deficits and unsustainable debt levels. This thesis analysed the performance of fiscal policy outcome in Africa vis-à-vis its adopted fiscal rules. It employs innovative empirical methods to investigate the determinants of fiscal transparency, a crucial controllable factor needed to accompany fiscal rules in order to achieve better fiscal outcomes. Despite its poor fiscal outcome and fiscal transparency, no known broad study focusing on these issues in the context of SSA is available. The findings of this thesis fill this literature gap. Chapter 1 provides a clear background to the study as well as the research objectives and significance of the thesis. Prior to the empirical investigation chapters and for proper guidance of our research estimations, relevant literature is reviewed and the theoretical framework for the study is presented in Chapter 2. Chapter 3, presents a broad overview of the research methods employed to address our research objectives. Chapter 4 addresses the first research objective – establishing the extent to which fiscal policy outcomes are determined by fiscal discipline (adherence to fiscal rules) in Africa. This chapter also x-rays the levels of fiscal transparency in Africa, upon situating fiscal transparency and accountability as elements of good governance. Using visual statistics such as graphs, tables and charts, the findings from Chapter 4 reveal a failure of fiscal rules to exclusively deliver better fiscal outcome in SSA countries. It also reveals the presence of poor levels of fiscal transparency in SSA countries.

The findings from Chapter 4 necessitate empirical investigations of the determinants of fiscal transparency in SSA, given its importance towards achieving better fiscal outcome. In line with the extant studies, the empirical chapters are broken down into institutional, political and economic determinants of fiscal transparency in SSA. A dynamic panel data GMM technique is employed in the three empirical chapters with a view to overcoming all sources of endogeneity and the weaknesses of prior cross-sectional studies, and also to accommodate for the dynamic component impact which may be attributed to policy reform efforts. The next substantial chapter, Chapter 5 (empirical paper 1) empirically establishes the institutional determinants of fiscal transparency in SSA. This highlights the importance of fiscal transparency as an accompanying tool to fiscal rules if better fiscal outcome is to be realised and the need for the current poor level of fiscal transparency in Africa is to be reversed. This chapter investigates the role of institutional drivers of fiscal transparency in SSA. The findings revealed that the overall quality of institutions in Africa positively influences fiscal transparency when considered as an aggregate index, while discretely only government effectiveness and the rule of law significantly contribute to improvements in fiscal transparency in Africa. Control of corruption, political stability, voice and accountability and regulatory quality did not yield the expected positive relationship with fiscal transparency. This implies that the influence of institutional governance factors on fiscal transparency is more positively impactful when all of them are considered *pari passu*. It contributes to the literature in terms of scope and methodology as prior studies were mostly cross-sectional studies involving a global mixture of countries (developed and developing).

The underlying political dynamics (factors) driving fiscal transparency in SSA were examined in Chapter 6. The highlights of this chapter include that it is the first to empirically examine the relationship between executive-legislative competitiveness (checks and balances) and fiscal transparency as well as its exclusive focus on SSA. Empirical evidence from the study reveals that political factors (internal and external) do sway the level of fiscal transparency in Africa. Specifically, evidence from the paper led to the conclusion that internal political forces such as partisan fragmentation and ethnic fractionalisation play a key role in determining the level of fiscal transparency in Africa. Interestingly, an important political instrument for public accountability, checks and balances does not positively influence fiscal transparency in Africa. A plausible reason for this finding may be attributed to the 'toe the party line syndrome' where party allegiance trumps democratic and institutional responsibilities, as is sometimes experienced in less developed democracies. Another key finding from this chapter is the positive role of independent candidature in the improvement of fiscal transparency in Africa. With regard to external political influence, the

result confirms the positive contribution of the conditionality of improvements in fiscal transparency as a precondition for Africa's receipt of foreign aid from donor agencies and countries. This has significantly contributed to improvements in fiscal transparency in SSA in the last decade. The findings also show that over-militarisation of the labour force (an indicator of a repressive regime) is negatively associated with fiscal transparency in Africa.

In Chapter 7, the economic determinants of fiscal transparency were established. The chapter made contributions to the literature in terms of the scope, methodology and factors examined. The findings reveal that fiscal transparency in Africa is positively influenced by economic factors such as the extent of trade openness, debt service, foreign aid and business disclosure. In line with expectations, the study revealed a negative and significant association between natural resource revenue and fiscal transparency. This is not surprising given the level of opacity surrounding the reporting of mineral revenues in mineral-rich countries. The study is the first to consider both the *de jure* and the *de facto* measures of capital account openness in the capital account openness–fiscal transparency nexus discourse. The *de jure* measure of capital account yields a positive but not significant association with fiscal transparency, while the *de facto* measure yielded a negative nexus with fiscal transparency and statistically insignificant.

From the findings of this thesis pertinent policy implications were drawn which could help improve fiscal transparency and consequently both fiscal outcome and public accountability. First is the need for a comprehensive institutional reform involving all the stakeholders in the budget process. These reforms should cover all the six sub-indices of institutions (underscored in Section 8.2) so as to achieve a major increase in fiscal transparency. On the political factors–fiscal transparency nexus, three discernible policy recommendations are drawn. First, there is a need for increased space for multiparty politics while also institutionalising the role of independent candidates in the electoral process. This would offer the principal (the electorate) a broader choice of candidates on the basis of transparency and immunity from the '*toe the party line syndrome*' that encourages opacity in the management of public finances. There is also a need for capacity building for all arms of government that are involved in the budget process because they are the critical agents for proper checks and balances and hence public accountability. A deeper understanding of their role will help them comprehend the opportunity cost (the real cost) of surrendering their institutional independence to party lines **–** a less transparent public finance system, poor fiscal outcome, poor public accountability and consequently poor service delivery. Thirdly, from the external political scene, donor countries and agencies are encouraged to sustain their current foreign policy of tying receipt of future aid to improvements in current levels of fiscal transparency. With regard to the economic factors–fiscal transparency nexus in Africa, the positive link between trade openness on fiscal transparency calls for greater trade liberalisation reforms policies by SSA states, as countries of the world are more willing to trade with countries that are more transparent in the management of government's finances. Also, closer economic integration between SSA countries such as the African Continental Free Trade Agreement (ACFTA) will be a step in the right direction. There is also a need to reverse the negative influence of mineral revenues on fiscal transparency in Africa. This can be achieved by institutionalising the precepts and resource charter of the Extractive Industry Transparency Initiatives (EITI), which sets the global standard for the good governance of oil, gas and mineral resources especially as it pertains to transparent reporting of revenues accruing from mineral wealth. Lastly, as with the foreign aid–fiscal transparency nexus, where aid receipt is tied to improvements in fiscal transparency, donor agencies should consider tying foreign aid to improvements in business disclosure given its positive nexus with fiscal transparency in Africa.

***Keywords*:** Fiscal Transparency; Fiscal Rules; Fiscal Policy Management; Better Fiscal Outcome; Institutional Improvements; Public Accountability; Rule of Law; Check and Balances; Natural Resource Revenue; Trade Openness; Foreign Aid; Debt Service; Civil Law; Business Disclosure; Dynamic Panel Generalised Method of Moments; SSA

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List of acronyms and abbreviations

2SLS	Two Stage Least Square
ACFTA	African Continental Free Trade Agreement
AEO	African Economic Outlook
AfDB	African Development Bank
BLUE	Best Linear Unbiased Estimator
CEMAC	Economic and Monetary Community of Central Africa
CoC	Control of Corruption
CPIA	Country Policy and Institutional Assessment
CSOs	Civil Society Organisations
EAMU	East African Monetary Union
EITI	Extractive Industries Transparency Initiative
EMU	European Monetary Union
EU	European Union
FE	Fixed Effect
FOI	Freedom of Information
GDP	Gross Domestic Product
GDPPC	GDP *per capita* in Current US$
Geff	Government Effectiveness
GMM	Generalised Method of Moments
GNI	Gross National Income
HIPC	Heavily Indebted Poor Countries
IBP	International Budget Partnership
IDASA	Institute for Democracy in South Africa
IFMIS	Integrated Financial Management Information System
IGQI	Institutional Governance Quality Index
IMF	International Monetary Fund
IV	Instrumental Variables
IV2SLS	OLS and Two Stage Instrumental Variables
LA	Latin America
MDRI	Multilateral Debt Relief Initiative
MoF	Ministries of Finance
MPs	Members of Parliament
MTBF	Medium-Term Budget Framework
MTEF	Medium-Term Expenditure Framework
Natres	Natural Resource Revenue (% of GDP)
OBI	Open Budget Index
OBS	Open Budget Survey
ODA	Official Development Aid
OECD	Organisation for Economic Co-operation and Development

OLS	Ordinary Least Square
PCA	Principal Component Analysis
Popngrowth	Population Growth Rate of a given Country
RE	Random Effect
Regq	Regulatory Quality
ROSCs	Report on the Observance of Standards and Codes
SA	South Asia
SGMM	Systems Generalised Method of Moments
SSA	sub-Saharan Africa
UKaid	UK Aid Direct
UNECA	United Nations Economic Commission for Africa
Urbpopn	Urban Population of a given Country
USAID	United States Agency for International Development
USB	University of Stellenbosch Business School
WAEMU	West African Economic and Monetary Union
WDI	World Development Indicators
WGI	World Governance Indicators

CHAPTER 1
INTRODUCTION

1.1 Background of the study

Globally, fiscal policy performance or outcome is subject to a number of controllable and non-controllable constraints.[1] The challenge of establishing the causes of these constraints and how best to address them has drawn the attention of academics and policy makers in recent times. This challenge is more germane in Africa where the domestic demand for critical resource mobilisation needed for investment, and consequently growth, is crucial. Poor fiscal policy performance is characterised by persistent fiscal deficits, soaring and unsustainable debt levels resulting in a *Debt to GDP* ratio that deviates from the fiscal expectations at the time of formulating the budget, and other unfavourable macroeconomic consequences (Cebotarai *et al.*, 2009).

It will suffice to point out that debt and deficits are not necessarily inimical to the economy, so long as the debt is invested in critical sectors of the economy, and both are kept within a sustainable threshold. Generally, fiscal policy is crucial to economic development of any country. Thus, the need for better fiscal outcome cannot be overemphasised. The seminal work on public finance by Musgrave (1959) highlighted the threefold rationale for sound fiscal policy which comprises promoting macroeconomic stability, efficient resource allocation and solving the problem of distributional disparities. Sub-Saharan African (SSA) economies are not left out of the debate on poor fiscal policy performance or efforts to address its controllable causes.

A recent study by Lledó and Poplawski-Ribeiro (2011: p. 1) aptly highlighted and confirmed the presence of poor fiscal policy performance in SSA. The study also suggested constraints to fiscal policy performance in SSA: "The implementation of fiscal policy in any country is subject to a number of constraints emanating from difficulties in, among other things, i) strategic considerations that lead to overambitious fiscal targets; ii) real time forecasting of downturns and recoveries; iii) lengthy budget procedures; and iv) political pressure to overspend or under tax…. Additional constraints comprise recurrent macroeconomic shocks, weak budget institutions, poor data quality, and weaknesses in forecasting capacity, reliance on unpredictable aid flows, slow project execution, and instability in the political system*"* (Lledó and Poplawski-Ribeiro, 2011: p. 1).

IMF (2008) and Lledó *et al*. (2009) acknowledged these factors as the reasons why fiscal policies in SSA have tended to be more pro-cyclical than elsewhere.[2] Also, the impact of aid inflows which can

[1] In the course of this research work, fiscal outcome and fiscal performance may be used interchangeably. Africa and sub-Saharan Africa may also be used interchangeably.
[2] Pro-cyclical fiscal policy is characterised by spending going up (taxes go down) in booms and spending goes down (taxes go up) in recessions. This is contrary to normative economic prescriptions that tax rates and discretionary government spending as a ratio of GDP should remain constant over the business cycle.

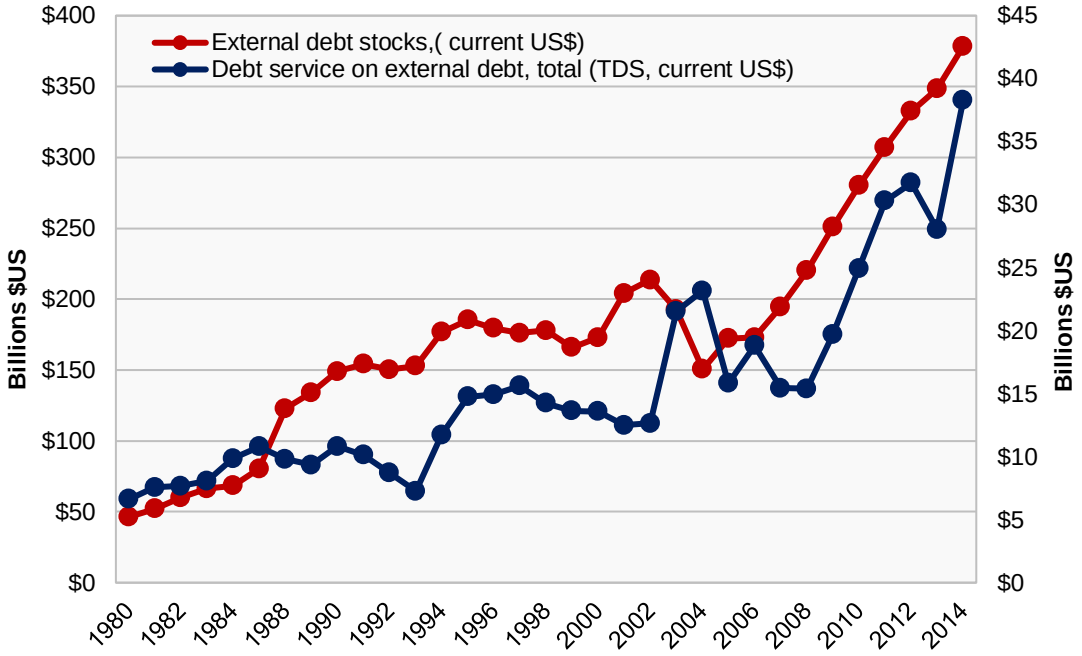
sometimes be volatile is easily felt by low-income countries. Ikhide (2004) identified the critical decline in aid inflow to developing countries and its attendant impact on development finance. He also identified the need for appropriate institutions for effective aid delivery. Obviously, in such countries, aid is more volatile than fiscal revenues, and gaps or shortages in aid and domestic revenues may coincide. In a related argument, studies such as de Renzio *et al*. (2011) found that aid-related issues have some explanatory power on the quality of public financial management systems.

In recent times, the International Monetary Fund (IMF) standards and the need to disclose fiscal risk correctly have extended the debate to include the quality of institutions as well as governance issues. Whilst studies such as IMF (2008), Cebotari *et al*. (2009), Lledó *et al*. (2009), Lledó and Poplawski-Ribeiro (2011) all focused on both controllable and non-controllable factors that affect fiscal policy implementation: the new theoretical perspective needs to focus on controllable factors such as fiscal transparency, accountability and governance on fiscal policy performance or outcome. Hence, the reason for the growing discourse on fiscal transparency, governance and the budgeting process. A more recent study by Makina and Mago (2015) considers the strengthening of public financial management systems and processes via enhanced transparency and accountability as essential elements for official development assistance. It will suffice to point out that the factors advanced thus far can be categorised into controllable factors (institutional and governance) and non-controllable factors (volatility in commodity prices and to an extent, foreign assistance).

1.2 Motivation

One of the major problems confronting developing countries is the need for efficient domestic resource mobilisation for development. A key way of achieving such domestic mobilisation of funds is from fiscal discipline enhancing savings efficiency which can only be achieved through a robust and efficient mechanism for good governance that is characterised by transparency and accountability in the use of public finances. This problem is, however, more evident in Africa where cases of widespread wastage and seeming disregard for laid-down budget processes abound. This is evidenced by poor levels of fiscal transparency currently recorded by SSA as evidenced by the consecutive Open Budget Surveys published by the International Budget Partnership (IBP) (see e.g. IBP, 2006, 2008, 2010, 2012 and 2015) reports. Studies such as Kilpatrick (2001), Alt *et al*. (2006), Alt and Lassen (2006a), Andreula *et al*. 2009, Wehner and De Renzio (2013) and more recently Tekeng and Sharaf (2015) have highlighted the importance of fiscal transparency, an element of good governance, as a necessary accompanying tool to fiscal rules if better fiscal outcomes are to be achieved.

Figure 1.1: Trend of SSA's total external debt stock and debt service, 1980-2015



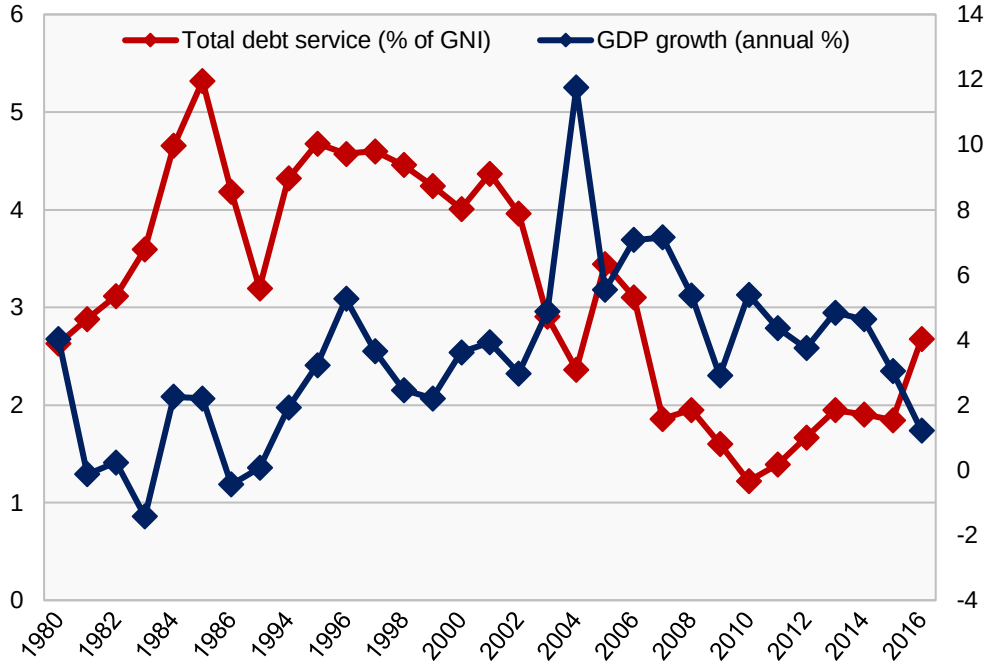
Source: Computed by author based on data sourced from World Bank – WDI (2017)

Most SSA countries seem to have displayed over time a high level of fiscal indiscipline characterised by poor fiscal outcome in the midst of subsisting fiscal rules. Sub-Saharan Africa (SSA) consists of developing countries most of which are characterised by a high level of poverty, persistent fiscal deficit and debt overhang. The 1996 Heavily Indebted Poor Countries (HIPC) Initiative, supplemented by the 2005 Multilateral Debt Relief Initiative (MDRI) was designed to provide debt relief for eligible countries in exchange for economic reforms. According to IMF as at 2017, the HIPC initiative has provided over US$76 billion in debt service relief to 36 countries, of which 30 were African countries. This represents over 80% of the countries that benefited from the HIPC initiative.[3]. From IMF (2017) statistics, barely ten years after the HIPC initiative, most HIPC-eligible African countries are either on a path to high-debt distress or debt crisis.

As represented in Figure 1.1, Africa's external debt stock and debt service can be seen to have mimicked the same expansionary path over time. Saddled with such huge debt burden, and by extension debt service, which is a first line charge expenditure on the countries' revenue, such countries are left with very meagre resources to invest in critical socio-economic sectors that could stimulate growth in output in the long run and alleviate poverty.

[3] https://www.imf.org/en/About/Factsheets/Sheets/2016/08/01/16/11/Debt-Relief-Under-the-Heavily-Indebted-Poor-Countries-Initiative

Figure 1.2: SSA debt service versus economic growth, 1980-2016



Source: Computed by authorbased on data sourced from World Bank – WDI (2017)

More worrying is the revelation shown in Figure 1.2, which juxtaposes the rate of economic growth in SSA against its total debt service (as a % of Gross National Income (GNI)). The figure reveals that between the 1980s and early 2000s, SSA's debt service (% of GNI) was higher than its growth rate. This coincides with the period which Easterly (2001) described as the "lost decades". However, from 2004–2005, the peak of IMF and World Bank debt relief programmes saw a turn-around period when SSA's economic growth was higher than SSA's debt service. Nonetheless, between 2010 and 2015, debt has been on the rise. By 2016, debt service had overtaken growth, portending a return to the pre-HIPC conditions in SSA if immediate measures are not taken to address fiscal indiscipline.

Despite years of budgetary allocation by SSA to key sectors of their economies, statistics from the World Bank's poverty and equity data bank (2017) reveals that over 50% of SSA population live below the international poverty line of $1.90 between 1988 and 2013. The most recent *country-by-country* statistic on poverty reveals that this trend has not changed.[4] The more worrying trend is that at the peak of the HIPC initiative between 2004 and 2005, there was an ebb in the burgeoning external debt pattern in SSA. However, this trend seems to have been reversed as statistics suggest an increasing trend from 2008 till date. This suggests a possible return to the fiscal indiscipline of the 1980s or a systemic inability to keep track of factors affecting the public finances in Africa. There is a likelihood that if efforts are not made to address these issues and ensure fiscal discipline, SSA

[4] See World Bank's Poverty and Equity Portal (2017) http://povertydata.worldbank.org/poverty/region/SSF.

economies may sink into another episode of debt crises such as that experienced in the 1990s which culminated in the need for the HIPC initiative.

Despite the debt relief by the HIPC initiative and other macroeconomic stabilisation programmes embarked upon by African countries not long ago, SSA economies, as evidenced by the foregoing statistics, are on the verge of returning to the lost decades (1980s – early 1990s) (Easterly, 2001), which were characterised by persistent fiscal deficits accompanied by soaring and unsustainable debt levels and high poverty rates, all of which contributed to high levels of social unrest.

The above underscored situations beg questions such as why do SSA economies continue to present poor fiscal performance? Are there other non-economic (institutional and governance) factors affecting fiscal policy outcome in SSA? If yes, are they within the control of each SSA country given that economic factors such as volatility in commodity prices and foreign aid may be non-controllable and thus not within their purview? Have SSA countries tried to put in place some form of fiscal rules to help them achieve better fiscal outcome? How successful are these rules, if they exist? Have these fiscal rules, if they exist, helped SSA to achieve better fiscal outcomes? Crucially, how transparent is the fiscal (budgeting) process in SSA? Ultimately, what are the determinants of fiscal transparency, a vital controllable accompanying tool for the achievement of better fiscal outcome? Questions of this nature are what this study seeks to answer.

From a fiscal policy perspective, the persistent high budget deficit as identified above will require higher taxes and borrowing in the future and may cause crowding out of private sector investment and consumption and thus dampen the rate of expansion in output (growth). Fiscal deficits can be financed through borrowing from domestic and foreign sources. However, given the conditionalities that most times accompany foreign borrowing, as well as the expeditious need for such funds, most governments generally tap into domestic borrowing as a first line of action when running into deficits and in need of resource mobilisation.

Domestic resource mobilisation in the form of borrowing is mostly done via government bonds or borrowing from the central bank via new money creation or via increased taxation (Carlin and Soskice, 2006). Both the deficits and the resultant soaring debts if persistent are inimical to the economy in at least two ways. First, soaring government borrowing may crowd out credit to the private sector which dampens economic growth. Second, and more critical, is the need for SSA economies to mobilise domestic resources for investment into critical sectors of their economy and hence stimulate growth. Whilst certain sources of persistent deficits and hence soaring debts, such as a shortfall in revenue due to volatility in commodity prices, and foreign aid, which are exogenously determined, leakages in domestic expenditure and revenue may result from endogenous (controllable) factors such as institutional lapses and a weak governance framework such as poor transparency and accountability.

The issue of domestic resource mobilisation and fiscal indiscipline cannot be completely discussed in isolation of the problem of lack of fiscal space in most developing countries. Several definitions of fiscal space have been advanced. However, all the definitions accentuate issues concerning the various aspects of resource mobilisation. Roy *et al.* (2007 p.2) defined "fiscal space is the financing that is available to government as a result of concrete policy actions for enhancing resource mobilization, and the reforms necessary to secure the enabling governance, institutional and economic environment for these policy actions to be effective, for a specified set of development objectives". Creating fiscal space frees up additional financial resources that can be deployed into other more deserving government spending (or tax reduction).

The basis for seeking to create fiscal space is for the creation of additional fiscal outlays which could aid economic growth and or pay for itself as a source of future revenue. Some of the diverse ways governments create fiscal space include: raising extra tax revenues via numerous tax measure or via sealing off of tax loopholes and strengthening the tax administration systems; reprioritisation of public expenditure (entails curtailing lower priority items and creating space for needed expenditure items); borrowing (external or domestic); grants from external sources and finally Seignorage. It is pertinent point out that seignorage, the printing of money by the central bank as mandated by the government with a view to lending such money to the government, is usually not the most considered option. This is owing to its inflationary tendency and the political backlash that easily comes with inflation before revenue from such a source is maximised. In addition to the challenges posed by the poor institutions in Africa, the problem of poor political systems often characterised by political parties that are most times not necessarily founded on economic and political ideology has not help matters when it comes to effective management of public finances in Africa. An in-depth discourse on the challenges posed by most of these issues such as fiscal indiscipline, poor institutions and poor level of fiscal transparency in SSA is presented in chapter 4.

Recent IMF standards and the need to disclose fiscal risk correctly have extended the debate on fiscal outcomes and its challenges to include the quality of institutions as well as governance issues such as transparency and accountability. Hence, the approach of the study will be twofold. First, it will examine the performance of fiscal policy outcome vis-à-vis fiscal rules, after which it will isolate the controllable (institutional and governance related) factors from the general factors influencing fiscal outcomes in SSA. Secondly, upon isolating the controllable factor(s) which, if improved upon, can lead to enhanced fiscal policy outcome, it will investigate the determinants of the said controllable factor(s).

While studies such as IMF (2008), Cebotari *et al*. (2009), Lledó *et al*. (2009) and Lledó and Poplawski-Ribeiro, (2011) all focused on both controllable and non-controllable factors that affect fiscal policy performance, none of them focused exclusively on controllable institutional issues such as fiscal transparency and accountability. The current debate by policy makers and academics in

the fiscal policy space is geared towards addressing these weak institutions of governance around the budgeting system (controllable factors), especially as their quality can affect fiscal outcome (Dabla-Noris *et al.*, 2010; and Khagram *et al*., 2013). The need to address these institutional factors affecting fiscal outcome cannot be overemphasised. First, fiscal outcome can trigger fiscal crises which have been noticed in the past to cause macroeconomic and financial sector instability. Secondly, against the backdrop of the forward-looking nature of economic agents, fiscal policy can also influence aggregate demand via future anticipated public debt stock (Blanchard and Summer, 1984; Blanchard, 1985). A growing number of studies such as Drazen (2000), Alt and Lassen (2006) and Eslava (2010) have identified institutional and political factors that influence deficit and debt accumulation. None of these studies have examined these issues exclusively in the African context, thus this thesis fills this existing gap.

The performance of fiscal policy is crucial to macroeconomic stability. Preliminary evidence suggests that SSA economies are currently struggling with poor fiscal outcomes as most of its soaring debts were incurred owing to the need to finance its persistent deficit in the budget resulting in poor overall and primary budget balances. These factors most times could culminate in excess borrowing by the government that can also lead to crowding out of the private sector from the credit market and consequently diminish the rate of growth of the economy (Hyman, 2002). These are in addition to the presence of other issues such as weak institutional and governance framework as well as the highly rent-seeking nature of most SSA economies. This then begs questions such as what should be done to improve fiscal performance in Africa? What are the controllable causes of poor fiscal performance in Africa? This study is also reinforced by the poor impact of budgets in Africa over the years as evidenced by poor socioeconomic indicators such as high poverty rates, poor literacy rates and high mortality rates despite huge budgetary allocations. Hence, this study analyses the issues surrounding the budgeting process in Africa, paying particular attention to the aforementioned controllable factors such as fiscal transparency, governance institutions etc. in the budgeting process, and proffers policy recommendations.

As mentioned earlier, one of the key development finance issues in many developing countries is how to mobilise domestic resources for critical investments to stimulate growth. Hence policy prescriptions from a study of this nature will contribute towards addressing issues of poor fiscal policy management. Particularly, it will help improve accountability on expenditures and persistent deficits. It will also aid in addressing issues around domestic resource mobilisation.

Against the backdrop of the foregoing, the new theoretical perspective in seeking to address poor fiscal outcomes needs to focus on controllable governance-centred factors such as fiscal transparency and accountability. Demanding accountability on public finances is predicated on the level of information or disclosure (i.e. fiscal transparency). There have been very few studies on the determinants of fiscal transparency, such as Alt *et al*. (2006), Alt and Lassen (2006), Andreula *et al.*,

(2009), Wehner and De Renzio (2013) and Tekeng and Sharaf (2015). However, in terms of scope no such studies have been done exclusively on SSA.

1.3 Research questions

Bearing in mind the above research problems, the study sets forth to answer the following research questions:

- To what extent are fiscal policy outcomes determined by fiscal discipline (adherence to fiscal rules) in Africa; and to what extent does fiscal transparency matter for fiscal outcomes?
- What institutional factors drive fiscal transparency in Africa?
- What political forces influence fiscal transparency in Africa?
- What macroeconomic factors affect fiscal transparency in Africa?

1.4 Objectives of the study

Specifically, the objectives of the thesis are as follows:

- To establish the extent to which fiscal policy outcomes are determined by fiscal discipline (adherence to fiscal rules) and to underscore the importance of fiscal transparency in Africa.
- To investigate how institutional factors influence fiscal transparency in SSA;
- To investigate how political forces influence fiscal transparency in SSA; and
- To investigate how macroeconomic factors, influence fiscal transparency in SSA.

1.5 Significance of the Study

Three related empirical papers as well as a background study (concept paper) have been put together to answer each of the research questions for the thesis. It is crucial to note that there exists strong justification for each of the three empirical papers and a background study that make up this thesis.

First, SSA countries have recorded poor fiscal policy outcomes evidenced by unsustainable debt levels and persistent deficits for over a decade. During this same period, it also recorded very poor levels of fiscal transparency. Attempts to address such poor fiscal policy outcome by employing the use of fiscal rules failed. However, the overwhelming literature as earlier highlighted points to the importance of high levels of fiscal transparency in conjunction with fiscal rules in order to address such poor fiscal outcome. The background study (Chapter 3) x-rayed the extent to which fiscal policy outcomes are determined by fiscal discipline (i.e. the quality and depth of fiscal rules) in Africa. The background study concluded that in addition to the adoption of fiscal rules, African countries need to improve their levels of fiscal transparency. Hence, it is anticipated that empirically analysing the

determinants of fiscal transparency in Africa with a view to improving its fiscal transparency, coupled with the adoption of fiscal rules, will lead to improved fiscal outcomes in Africa.

Three distinct groups of drivers of fiscal transparency have been identified from the prevailing literature: institutional, political and economic. It has been argued that institutional quality can improve the level of fiscal transparency. Employing the World Bank's institutional governance indicators, the first empirical paper (Chapter 4) investigates the nexus between the quality of institutions and the level of fiscal transparency in SSA. It has been argued that the dynamics and interplay between domestic political forces such as partisan fragmentation and ethno-linguistic polarisation and international political forces influences the level of fiscal transparency. Hence, in the second empirical paper (Chapter 5), it was important to investigate the relationship between these political forces and the level of fiscal transparency in the context of SSA.

Lastly, the fiscal transparency literature points to the emerging role of economic factors as an important group of influences that can improve the level of fiscal transparency. Amongst others they include economic openness (trade and financial openness), debt service, foreign aid and business disclosure. A study of the impact of these economic factors on fiscal transparency is reinforced by the ambition of African countries to form a common market with the prospects of ultimately becoming an economic union in the future (Gollwitzer, 2010). However, as a build-up to achieve such a level of economic integration, like the European Union (EU), a high level of fiscal discipline by member states is required. To achieve this, most African countries have adopted some form of supranational fiscal rules similar to those adopted by EU member states based on the Maastricht Treaty.[5] This will entail ease of restrictions on cross-border capital flows and trade openness. However, like other drivers of fiscal transparency, studies are yet to be carried out examining the role of these economic drivers of fiscal transparency in Africa. The third empirical paper (Chapter 6) examines the role of these economic forces in driving fiscal transparency in Africa.

1.6 Structure of the thesis

The thesis is organised around four main themes: an overview of fiscal outcome; fiscal discipline and fiscal transparency in Africa; institutions and fiscal transparency in Africa; the political determinants of fiscal transparency in Africa; and finally, the economic determinants of fiscal transparency in Africa. With the exception of the background chapter (Chapter 4), which situates and contextualises the thesis by establishing the importance of fiscal transparency to realising better fiscal outcome, each of our themes though related to fiscal transparency, are developed as a stand-alone essay.

[5] For instance, the West African Economic and Monetary Union (WAEMU) adopted a convergence criterion (fiscal rule) of deficit not exceeding 3% of GDP and the nominal debt-to-GDP ratio was kept at 70% of GDP.

Chapter 1 introduces the research as well as the prevailing debates surrounding fiscal policy implementation and outcome. Chapter 2 presents the theoretical framework as well as a general review of relevant literature. From existing literature, it was possible to categorise the literature on the determinants of fiscal transparency into three discernible categories: institutional, political and economic. A theme-specific review of literature is presented in each of the empirical papers. In chapter 3, an overview of the research methodology employed to address each research question is presented.

Chapter 4 provides an overview of the outcome of fiscal policy implementation i.e., fiscal deficits, debts, revenue and expenditure in sub-Saharan Africa (SSA) from 2008 till date. This was with a view to identifying the trend in their performance and localising the controllable causes of such trends. It reveals the efforts of SSA to achieve better fiscal outcome via adoption of fiscal rules and how this did not yield the desired fiscal outcome given the continued poor fiscal outcome posed by African countries despite the adoption of fiscal rules. Furthermore, and importantly, findings from the chapter also reveals the concurrent presence of poor levels of fiscal transparency in Africa. More importantly, it reveals the importance of fiscal transparency as a necessary tool to accompany fiscal rules in order to achieve better fiscal outcome.

The empirical investigation commences in Chapter 5 with the empirical evaluation of the institutional determinants of fiscal transparency. Chapter 6 investigates the political determinants of fiscal transparency. The last empirical chapter, Chapter 7, assesses the economic determinants of fiscal transparency. The thesis ends with Chapter 8 which presents the summary, conclusions and policy recommendations drawn from the background study as well as from the findings of the three empirical chapters of the thesis.

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CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the relevant literature as well as a conceptual and theoretical framework related to the thesis. A conceptualised framework will be developed based on the reviewed relevant literature on fiscal outcome and fiscal transparency. The chapter will build up to our theoretical framework. It will also entail an empirical review of prior studies aimed at establishing the determinants of fiscal transparency with a view to identifying and isolating into sub-thematic areas, the different factors whose relationship with fiscal transparency in Africa will subsequently be examined. Nonetheless, a theme-specific review of literature will also be presented in the empirical chapters (i.e. Chapters 4, 5 and 6).

2.2 Conceptualised framework

According to Jones (1950) and Millar (1963), the word fiscal is derived from the Latin word *fiscus*, which refers to the privy purse of Roman Emperors. Upon the coffers of such emperors lay the onerous responsibility (cost) of maintaining the army and its fleet, paying the bureaucracy that ran Roman administration, and grants to urban plebs such as distribution of moneys or food items. Centuries down the lane, the purview of the public finance process across countries is akin to its use in imperial times. These include the effect of the budget on allocation of resources, efficiency and effectiveness of resource use and macroeconomic performance (Musgrave, 1959; Oates, 1968; World Bank, 2012). By the latter part of the 20th century, the emerging principles underpinning modern budgeting or sound budgeting became governance cum institution-centred. These principles include comprehensiveness and discipline, honesty, information, contestability, legitimacy, flexibility, predictability and most importantly transparency and accountability (World Bank, 1998).

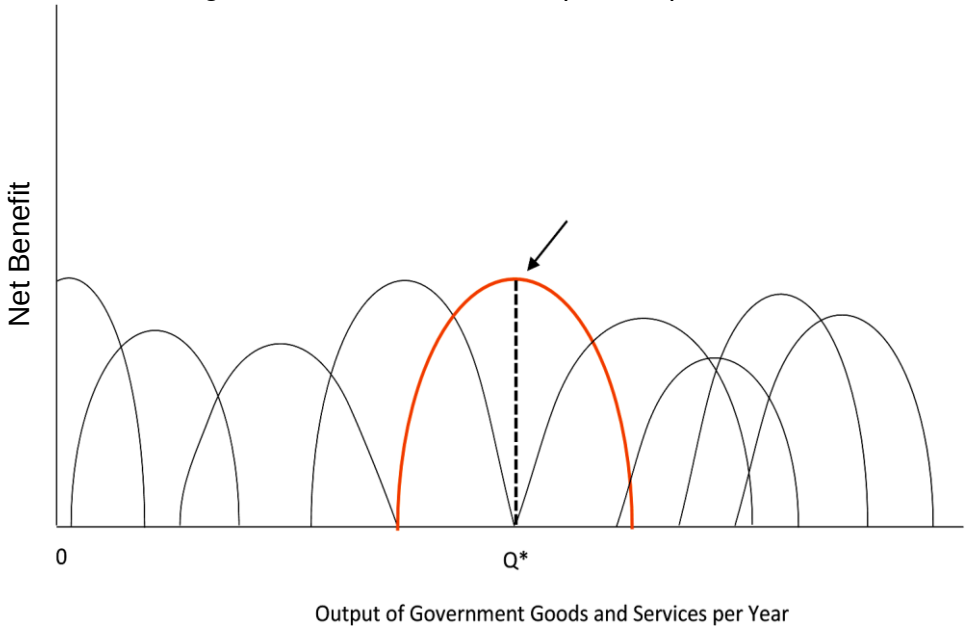
One of the major debates that preoccupied the 19th and 20th century public finance and macro-economic discourse was the causes of expansionary government expenditure. Different theoretical perspectives were offered during these periods for expansionary government spending. One of the earliest of such studies is Wagner (1883). Known as Wagner's law, it attributed the growth in government expenditure to three factors: industrialisation-led increase in government expenditure; cultural factors and welfare expenditure (especially education and the redistribution of income). Wagner identified the development of a large number of monopolies due to large scale capital investment needed during the early stages of industrialisation. Musgrave (1969) and Rostow (1971) shared a view similar to the first factor identified by Wagner (1883). They attributed the growth in

government expenditure to the development of an economy from a subsistence and traditional economy to an industrialised economy. Relating Wagner's third factor to SSA, this may have been the situation in 1980s as most SSA economies had no option but to embrace privatisation of most elements of the public sector, and liberalisation as well as a reduction in public expenditure as preconditions for the IMF Stabilisation programmes (or Structural Adjustment Programmes). Bird (1971) highlighted the conditions for Wagner's law to hold as including rising *per capita* income, technological and institutional changes and the implicit assumption of democratisation. Bird (1971) was a watershed moment in public expenditure management as it was one of the earliest studies to introduce the role of institutions and governance in the lexicon of public finance or public expenditure management.

By the 1980s, the evolving and increasing role of institutions and governance on public finance management had begun to be noticed. One of such studies was Meltzer and Richard (1981): the Meltzer-Richard hypothesis employed the general equilibrium model, and found that majority voting decides the size of income distribution and thus the share of government expenditure. They argued that the median voter plays a crucial role in determining the size of the government sector in a democracy. And in a two-party democracy, the median voter will determine who will win the election and attempts will be made by both parties to win his support. To achieve this, Meltzer and Richard (1981) argued that there will be pressure for redistribution of income if the median voter's income is less than the average income of the population. To gain the support of the median voter, political parties will advocate policies that could result in higher taxes and higher expenditure on social services (Black *et al.,* 2008).

As aptly explained by Hyman (2002), political candidates have the tendency to assume a position that is indicative of the median on the scale. Figure 3.1 reflects the net benefit received by each voter from each possible political platform on government activity, with an assumption that a greater quantity of government goods and services per year connotes a more liberal platform. Whereas most conservative voters preferred outcome occurs at zero government goods and services, most liberals prefer the opposite: a higher amount of government goods and services. Q^* connotes the median most-preferred outcome and corresponds to the highest peak of the net benefit function of the median voter. Hence Q^* is the political equilibrium point given that the net benefits of the voters are higher under Q^*. The unbalanced productivity growth model by Baumol (1967) attributed a disproportionate increase in government expenditure to an increase in the prices of inputs used by the public sector relative to the private sector. Baumol (1967) developed this microeconomic model of *unbalanced productivity growth* in explaining the growth in government expenditure.

Figure 2.1: Median voter and political platform



Source: Adapted from Hyman (2002)

The 20th century saw the institutionalisation of democratic governance in most parts of the globe, characterised by huge bureaucratic structures and interest groups. This gave birth to the influence of vote maximisation on the management of public expenditure. As aptly pointed out by Black *et al.* (2008), in a democratic dispensation, and assuming the absence of a dictatorial rule, social choice rules will range from unanimity rule, by which a proposal will require 100% support before it can be passed, to an ordinary majority rule, by which 50% plus one vote are needed. Majority rule is the most preferred social choice rule. In representative democracies, voters' interest is symbolised by the many actors including elected politicians, private and public interest groups as well as bureaucrats. The role of politicians is primarily vote maximisation from elections. Vote maximisation for politicians is akin to a utility-maximising consumer or profit-maximising entrepreneur.

Theoretically, the fiscal policy implementation model is chiefly concerned with the maximisation of the utility of fiscal policymakers. For politicians to achieve this in a representative democracy, they apply the median voter theorem. This theorem defines the median voter as one whose sets of preferences partitions the voting community into exactly two halves after which they will set out different options of budget for which each of them will vote. The combinations of the budget options that will enjoy majority support above 50% is an option that will provide minimum welfare loss to the whole group (community of voters). One of the shortcomings is that both the electorate and politicians are not perfectly informed. Arrow's (1951) impossibility theorem drew our attention to the limitations of the majority rule theorem citing the impossibility of arriving at a logically consistent set of social preferences from a corresponding set of individual preferences on the basis of an "ethically acceptable" or democratic social choice rule (Black *et al.,* 2008).

The link between fiscal transparency and the medium voter theorem is captured by the impact of fiscal transparency on the ability of the electorates to accurately monitor and assess the incumbent government's budgetary policies including its debt levels prior to election. A higher degree of fiscal transparency, especially on current debt levels is easily adjudged by the electorates as a sign of a competent incumbent government. Employing the political agency model, Shi and Svensson (2002) as well Alt and Lassen (2003) revealed that voters prefer more competent elected officials in office, given their capability to provide more public goods at given levels of taxation and private consumption. However, government's redistributive expenditure and taxation policy thrust can be deleteriously related to growth given their adverse impact on capital accumulation (Alesina and Rodrik, 1994). It discourages savings because it redistributes wealth from the owners of capital (the rich) to the capital poor so as to resolve inequality. Taxes most times rise with higher incomes (progressive taxation) but the benefits of public spending (by government) accrues to all proportionately. Preferences however, differ and may not coincide with tax efforts. An individual who earns high income and pay higher taxes may actually prefer lower taxes and lower consumption expenditure. The economy's growth rate depends on the role of capital accumulation which in turn depends on the amount of tax government is able to raise to finance its expenditure. Hence policymakers are confronted with question(s) such as is what constitutes the growth maximising tax rate? Ordinarily this will be the high taxes on owners of capital. However, in reality, incumbent government(s) cannot levy this tax because it could lose an election if it does. It therefore levies the tax that is closer to the preference of the voters (median voter) in order to win elections, rather than levy a tax rate that maximises economic growth.

The 1980s and 1990s were characterised by persistent fiscal crises, especially in developing countries. This was typified by persistent fiscal deficit, and unsustainable and skyrocketing debt thresholds. African countries formed the bulk of the heavily indebted countries. Easterly (2001) termed these periods as the lost decades. These periods were followed by the World Bank HIPC-initiative with African countries accounting for over 70% of the countries that benefitted from HIPC-initiative debt relief. The World Bank (1998) described the evolving key principles underpinning modern budgeting as institution-centred and comprising comprehensiveness and discipline, honesty, information, legitimacy, flexibility, predictability and, most importantly, transparency and accountability. Prakash and Cabezon (2008) cited institutional weaknesses as one of the main causes of poor economic growth in developing countries. Rodrik *et al.* (2002) argued that the level of institutional development helps explain differences in income (revenue) between countries.

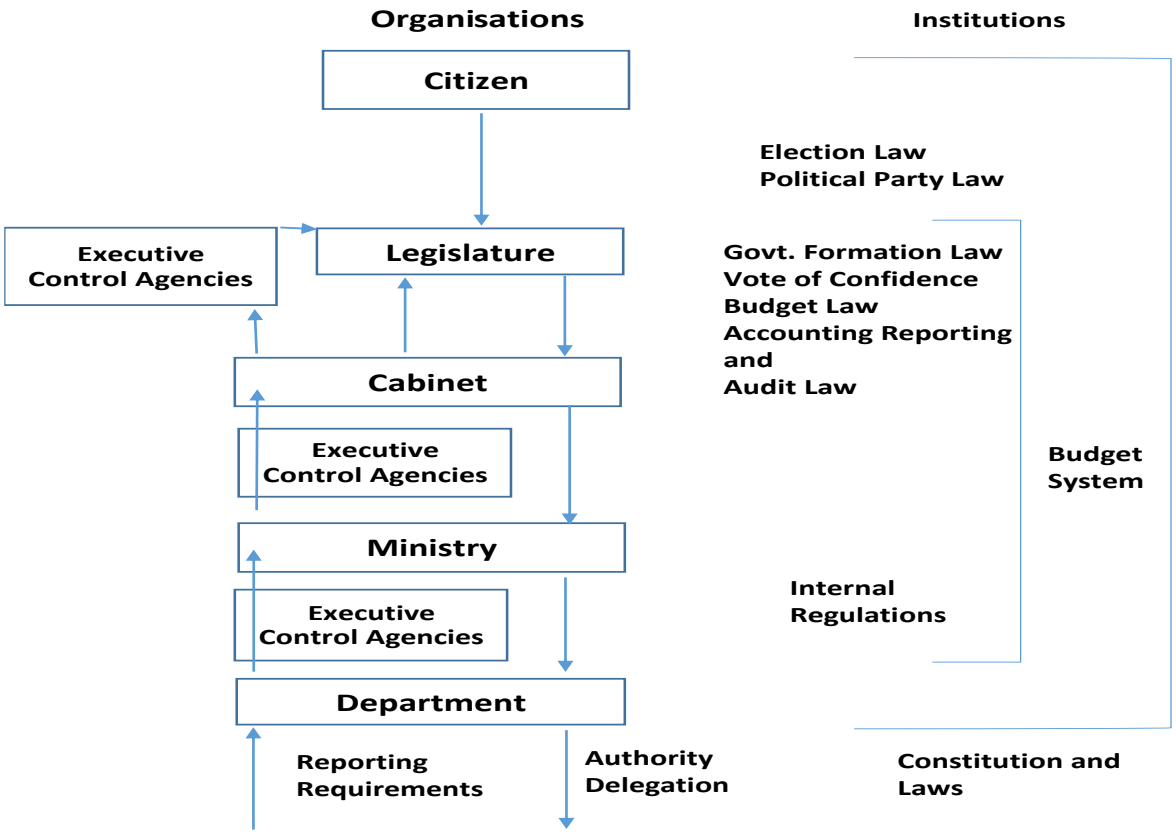
As part of their public finance reforms, with a view to achieving aggregate fiscal discipline (debts and deficits within the sustainable threshold) and enhanced public accountability, most African countries adopted various fiscal rules without meaningful success. Nonetheless, overwhelming emerging literature such as the World Bank (1998), Kilpatrick (2001), Milesi-Feretti (2004) and Alt and Lassen

(2006) amongst others have identified fiscal transparency as an important tool that must accompany fiscal rules if such rules are expected to yield the desired fiscal outcome. Given the importance of fiscal transparency towards achieving fiscal discipline and public accountability, what then is fiscal transparency and what are the factors influencing fiscal transparency? The most comprehensive definition of fiscal transparency remains that offered by Kopits and Craig (1998 p. 1). They defined fiscal transparency as "openness toward the public at large about government structure and functions, fiscal policy intentions, public sector accounts, and projections. It involves ready access to reliable, comprehensive, timely, understandable, and internationally comparable information on government activities—whether undertaken inside or outside the government sector—so that the electorate and financial markets can accurately assess the government's financial position and the true costs and benefits." Against this background, the effectiveness of fiscal transparency and fiscal institutions has been recognised in public finance literature as crucial contributors to improved fiscal and outcomes.

2.3 Institutional budget arrangements and fiscal transparency

The budget system and process in democratic countries exemplify a *Principal-Agency* relationship. Figure 2.2 represents the reporting requirements (whom to report to) and the authority delegation of the budget process with the citizens as the ultimate delegator**.** A key objective of enhanced fiscal transparency is to achieve better fiscal outcomes and to improve public accountability. Such an enhanced public accountability process is expected, amongst other things, to ensure efficient public expenditure management which could in turn reduce the extent of deficits and debts. Amongst the initial studies that lay the foundation for governance and an institution-oriented approach to budget reforms for developing countries are the World Bank (1998) and Schick (1997 and 1998). The World Bank (1998) built on Schick's (1997) proposition on *getting the basics right* in terms of budget reforms for developing countries. The World Bank (1998) argued that in considering budgetary reforms, countries should build institutional mechanisms that support and demand a performance orientation for all dimensions, arguing that such countries should also create mechanisms to promote *transparency* and *accountability*. However, both transparency and accountability to a large extent depend on the quality and timeliness of the reporting on fiscal information. This consequently emanates from the quality of institutions guiding the entire budget system and the whole range of pertinent players and stakeholders ranging from the president, ministers, the legislature, the community, central agencies, line agencies, and individual managers or front-line providers (World Bank, 1998).

Figure 2.2: Conceptual framework: institutional budget arrangements as a principal agency relationship



Source: Adapted from the World Bank's (1998) Public Expenditure Management Handbook

Two notable deductions can be drawn from the foregoing positions by Shick (1997) and built on World Bank (1998). First, organisations are not institutions – without effective institutional drivers such as effective laws and regulations, government effectiveness, rule of law *etc.* guiding the budget process, the budget system will not be effective and fiscal policy performance could be compromised. Secondly, they highlighted the importance of transparency and accountability in an efficient budget process and political process.

2.4 Theoretical Framework: Principal Agency theory

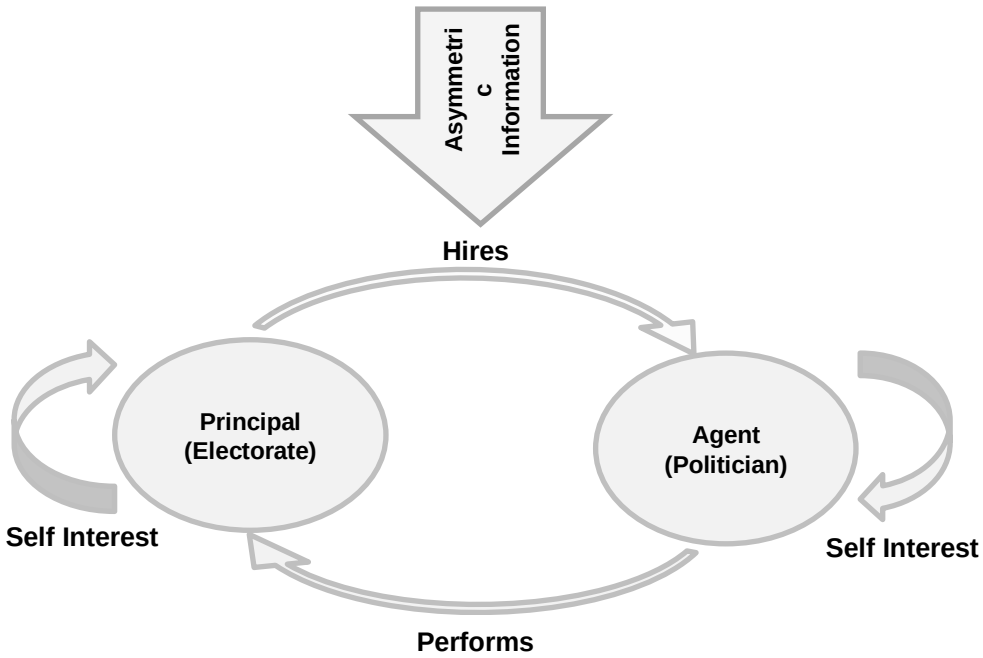
An indispensable principle in the management of public finances is that some people (via elections or by appointments of elected officials) are saddled with the responsibility of spending other taxpayer's (other people's) money. Shah (2007) aptly highlights that in democracies, voters delegate the power over public spending and taxes to elected politicians. Two prominent theoretical paradigms – the *principal-agency theory* and the *common pool theory* – best capture and explain the political and institutional determinants of fiscal transparency. As represented in Figure 2.2, one

of the key reasons why policy makers or politicians (agents) prefer a less transparent fiscal process is fear of political repercussions from their principals (the electorate) who hire them via elections and fire (*fail to re-elect*) them when poor fiscal outcomes are documented or at the first sign of unexplained secrecy on how government finances are being managed.

De Simone *et al.* (2017) highlighted that most of the prevailing studies on fiscal transparency are predicated on the *principal-agency theory* which models the relationship between citizens (principals) and politicians (agents). Consistent with this model, such relationships are typified by imperfect and asymmetric information that permits fiscal policy misconduct by self-interested agents. Against the backdrop of the principal-agency framework, the mandatory release of fiscal information that is introduced by fiscal transparency measures will lessen information asymmetry, thus enabling monitoring by principals. This will facilitate the emergence of a government that will be more accountable and responsive to the electorate. Hence, fiscal transparency becomes an important requirement of public accountability as it rewards (votes in) or sanctions (votes out) agents (elected officials) based on whether or not they have been transparent. Essentially, it aids voters' understanding of government's fiscal plans and processes (Von Hagen, 2007).

As clearly emphasised by Lindstedt and Laurin (2010), fiscal transparency thus becomes the indispensable driver of the process of demanding accountability from fiscal policy decisions by politicians and hence the effectiveness of citizens' delegating power. Heald (2013) reinforced this point further by emphasising that transparency is essentially about governance, and information flows can be expected to be compromised by attempts to cover the trail of corruption.

Figure 2.3: Principal Agency Theory, fiscal transparency and accountability



Fiscal transparency and accountability are anchored on the dynamics and varying interest between the policy makers (politicians), the quality of the governing institutions and the stakeholders in the budgeting process. As such, an improved level of fiscal transparency reduces the level of information asymmetry on the part of the electorate which in turn aids voters in making their voting decision within the retrospective voting paradigm.

Von Hagen (2007) emphasized characteristics of the delegation arrangement that are vital to the conduct of fiscal policy. Foremost is the *principal-agent* relationship between the electorates (principals) and elected officials (the agents) which argues that elected politicians could receive rents from being in public office and spend public funds on projects other than those needed by the electorates. The next problem highlighted by Von Hagen is the common pool problem wherein government's expenditure is drawn from a common pooled fund also known as the general tax fund, but spent on public policies aimed at benefitting individual groups (a particular constituency) rather than policies that could be beneficial to the society as a whole. This is mostly at the behest of the representative for such a constituency. Consequently, the net benefits for the targeted groups usually exceed the net benefits for society as a whole. Such situations yield excessive levels of public spending and huge deficits and debts (von Hagen and Harden, 1995; Velasco, 2000; Milesi-Ferretti, 2004).

This delegation of authority to elected politicians leaves room for the prospect of politicians extracting rents from the public position they occupy and executing public expenditures on projects other than those that the electorate desire. This is owing to the substantial residual powers which politicians have. Such residual powers emanate from the quantity and quality of information on the true state of government finances, how they are being managed and the significant discretionary expenditure powers that are privy only to elected officials (agents) and not to the electorate. Obviously, as such residual increase, the greater will be the divergence between voter preferences and actual policies. On the other hand, the electorate will wish to curtail these privileges by subjecting politicians to stringent and detailed rules that meticulously describe what they can and cannot do and under what definite circumstance(s). As aptly described by Persson *et al.* (1997) and Seabright (1996), the *principal-agent* relationship in the context of the budget process resembles an incomplete contract.

2.5 Empirical Study

Whereas the literature on fiscal transparency has gained traction amongst scholars and policy makers for quite some time, most of these studies have focused on the benefits of fiscal transparency rather than the factors influencing fiscal transparency. Kilpatrick (2001) and Milesi-Ferretti (2004) highlighted the need for fiscal transparency as an accompanying tool to fiscal rules in order to achieve better fiscal outcomes. Fiscal transparency has been identified as a vital element needed

for sound fiscal policy management and thus a requirement for robust public sector governance. The lack of literature on its determinants, especially in the context of SSA, is still a source of concern. This is more worrying given the region's poor fiscal performance for over two decades. Alt and Lassen (2003) corroborated this position stressing that theoretical literature on the causes and consequences of fiscal (or budgetary) transparency is limited.

Wide-ranging factors have been identified from the prevailing literature as causes or triggers of transparency. Using data from the various states in the US, Alt *et al.* (2006) was one of the earliest empirical works to investigate the determinants of fiscal transparency. Their study revealed that both political dynamics as well as past fiscal outcomes affect the level of transparency. It also revealed that there is a propensity for political competition to lead to an increase in the level of fiscal transparency. Nevertheless, it is very important to point out that the over-simplistic definition of partisan fragmentation in the US context (where a two-party system prevails) as employed by Alt *et al.* (2006) may assume a stronger dynamic in multi-party democracies which is now common in African societies. Similarly, studies by Alt and Lassen (2006) based on OECD countries revealed that there is a propensity for political competition to lead to an increase in the level of fiscal transparency. Also, a higher and persistent prior (lagged) deficits level could also trigger calls from the electorate for more transparency in future government budget processes.

A cross-sectional study by Andreula *et al.* (2009) was the first empirical study to specifically examine the role of institutions in influencing fiscal transparency. The study was based on 82 developed and developing countries using the basic Ordinary Least Square (OLS) and Two Stage Instrumental Variables (IV2SLS) methods. Their study revealed that better institutional quality gives rise to better levels of fiscal transparency. Andreula and Chong (2016) arrived at a similar conclusion and revealed a positive association between the six World Governance Indicators (WGI) and fiscal transparency. Using the OLS, Gollwitzer (2011) found that strong budget institutions help to enhance fiscal balances and lower public external debt. Ellis and Fender (2006) revealed that fiscal transparency can be related implicitly or explicitly to the existence of levels of corruption and vice versa. Glennerster and Shin (2008) revealed a negative relationship between fiscal transparency and corruption. Heald (2013) suggested that information flows (transparency) can be expected to be compromised by attempts to cover the trail of corruption.

Focusing on the nexus between mineral wealth and fiscal transparency, Ross (2011) identified the link between natural wealth and fiscal transparency for a sample of 83 countries. The study revealed that the nexus depends on the prevailing political system. Amongst democratic countries, a country's mineral wealth is not related to the transparency of its government. However, this was not the case amongst autocracies where greater oil wealth was found to be correlated with less fiscal transparency. Interestingly, the study found non-fuel mineral wealth unexpectedly associated with greater transparency. Khagram *et al.* (2013) listed four key causal triggers whose complex

interaction advances or impedes fiscal transparency: political transitions, fiscal and economic crises, political and corruption scandals, and external influences. External influence as a trigger for fiscal transparency has received most attention lately. This emanates mostly from international donor countries and agencies insistence as a policy, on tying improvements on the existing levels of fiscal transparency as a precondition for future donor support (Drummond, 2011).

Most African countries transited from closed authoritarian regimes to democratic governance in the last two to three decades, a period which Huntington (1991) referred to as the third wave of democratisation. Prior to this period, most African countries were categorised as closed authoritarian regimes. Characteristically, such closed states were marked by low transparency thresholds given the paucity of institutions for checks and balances. Khagram *et al.* (2013) described multiparty democratic administrations as characterised by separation of power, policy contestations, party competition, organised civil society organisations, engaged citizenry and an active media. These are key ingredients for a transparent society. They argued that these triggers create opportunities and shape incentives for key players (including political leaders, civil servants, and civil society actors) to take action in designing, implementing, and sustaining reforms designed to promote fiscal openness. (Blöndal 2003) as underscored and cited by Benito and Bastida (2009) emphasized the crucial role played by the legislature in ensuring fiscal transparency and good governance. It pointed out that fiscal transparency goes with two crucial factors; 1) an effective legislation that scrutinises budget reports and discusses and influences budget policy; 2) an effective civil society represented through the media and nongovernmental organisations, which influences budget policy and holds government accountable.

The role of political corruption scandals in the quest for greater fiscal transparency in SSA cannot be overemphasised. Itodo and O'Regan (2018) underscored the role played by political and corruption scandals in triggering fiscal transparency accountability, especially in Africa's most populous country, Nigeria, where the promise of a more transparent government saw a peaceable change of power as the incumbent lost in the general election in 2015. At the core of democratic governance lies the principle of *separation of po*wer or *checks and balances.* This presupposes that for good governance to prevail, the institutions of the state that facilitate checks and balances must operate at their optimum and thus the oversight function of the parliament is to check and exert some form of transparency and accountability from the executive organ of the government to the public. Such demand for accountability on the efficient use of public resources is emphasised by Schiavo-Campo (2007), who rightly points out that the notion of good governance lies on four pillars: transparency, participation, predictability and accountability.

Fiscal and economic crises can also trigger calls for higher levels of fiscal transparency. Caprio (1999) supports this position. Caprio's study on the causes of the Asian financial crises revealed that the hardest hit Asian countries during the financial crises were the least transparent Asian countries.

Vishwanath and Kaufmann (1999) also argued that paucity of transparency and, consequently, the lack of public transparency can serve as a constraint on policy economic and social outcomes, impacting negatively on welfare and development. Tekeng and Sharaf (2015) extended the literature on fiscal transparency, being the first study to incorporate the impact of trade openness, capital account openness, business disclosure and literacy level into the determinants of fiscal transparency discourse. Using the Two Stage Least Square (2SLS), Tekeng and Sharaf focused exclusively on 26 developing countries: only seven SSA countries that have the data needed to design the fiscal transparency index are included[6]. They also introduced factors such as natural resources wealth. They found that the quality of institutions (proxied by regulatory quality) as well as literacy rates positively affects fiscal transparency.

Both Wehner and De Renzio (2013) and Tekeng and Sharaf (2015) examined the nexus between natural resource dependency and fiscal transparency. Both studies found that the level of natural resources influenced fiscal transparency negatively. Tekeng and Sharaf revealed that, contrary to expectations, capital accounts have a negative relationship with fiscal transparency. However, the quality of institutions and literacy were found to positively affect fiscal transparency. A *theme-specific* review of literature is presented in the empirical chapters – Chapters 5 to 7.

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CHAPTER 3
RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research procedures employed in this study. *Amongst other things*, it provides an outline of the research techniques and analysis employed in the chapters that dealt with our research objectives. Moreover, this chapter provides research direction in terms of the phenomena investigated by our research questions in the subsequent chapters as well as our research design and approach. The sources of data, time span of the data used to address our research questions, as well as the general scope of the study are also provided in this chapter. As earlier highlighted, the structure of the thesis is organised around four main themes: 1) An overview of fiscal outcome; fiscal discipline and fiscal transparency in Africa; 2) Institutions and fiscal transparency in Africa; 3) The political determinants of fiscal transparency in Africa; and 4) The economic determinants of fiscal transparency in Africa. Baring the background chapter (Chapter 2), which situates and contextualises the thesis by establishing the importance of fiscal transparency to realising better fiscal outcome, each of our themes though related to fiscal transparency, are developed as a stand-alone essay. However, it is very pertinent to point out that owing to the need to capture the impact of prior policy reforms attempt on fiscal transparency, amongst other advantages that comes with it, we employed the panel data system GMM for our empirical chapters (chapters 5-7).

A dynamic panel model is employed to empirically examine the nexuses between; fiscal transparency and institutional factors; fiscal transparency and political factors; and fiscal transparency and economic factors in the context of Africa in our empirical papers chapter 5, chapter 6 and chapter 7 respectively. The advantages of the dynamic panel model *over* prior cross-sectional approaches especially as it relates to our study, and a more detailed theme-specific methodology are fully elucidated in our thematic empirical chapters on determinants of fiscal transparency (i.e., chapter 5, 6 and 7).

3.2 Methodology on Research Objective 1

Chapter 4 is dedicated to achieving **Research Objective 1**: *To establish the extent to which fiscal policy outcomes are determined by fiscal discipline (adherence to fiscal rules) and to underscore the importance of fiscal transparency in Africa.* The chapter entails an in-depth and analytical overview of the outcome of fiscal policy implementation in sub Saharan Africa (SSA). It uses virtual descriptive statistics such as charts, graphs and tables and statistical ratios to critically x-ray the performance of SSA's fiscal indicators such as fiscal deficits, debts, revenue and expenditure with a view to

identifying the trend in their performance and differentiate the controllable causes from the non-controllable causes of such trends. To answer the research question on adherence to fiscal rules in Africa, the above-mentioned fiscal variable ratios are ***examined vis-à-vis*** the national fiscal rules or supranational fiscal **convergence criterion** where a country belongs to an economic integration block that has such fiscal convergence rules. The fiscal variable ratios are also compared against a more slightly relaxed IMF recommended ratios. This is with a view to identifying the trend in their performance. Crucially, chapter 4 examines whether or not fiscal rules have exclusively helped SSA countries to achieve better fiscal outcomes.

Several influential works *such as* Kilpatrick (2001) and Milesi-Feretti (2004) emphasise the importance of fiscal transparency as a necessary accompanying tool to fiscal rules, if better fiscal outcome is the policy objective. Hence, the chapter also serves as a cross-walk linking fiscal transparency to fiscal outcome by establishing the importance of fiscal transparency for the achievement of better fiscal outcome. The section will further explore key SSA's controllable fiscal governance indicators that can influence fiscal outcomes, particularly fiscal transparency. This is with a view of revealing the quality of fiscal transparency in SSA, and from existing literature, establishes the importance of fiscal transparency towards achieving better fiscal outcomes. The chapter therefore serves as a precursor to a robust empirical analysis of the determinants of fiscal transparency in subsequent chapters. Following these expositions, the specific questions chapter 4 investigates are: What is the trend of fiscal policy performance (fiscal outcome) in in SSA? What is the depth of Fiscal Rules that were meant to ensure fiscal discipline in SSA and the "level of adherence to" in Africa? How Open (transparent) is the budgeting process in SSA?

Chapter 4 relies on secondary data series drawn from various data sources including the World Bank's World Development Indicators and the IMF's Fiscal Policy Monitor (various editions). Furthermore, using data from the World Bank's World Governance Indicator, chapter 4 examines the performance of key budgetary institutional variables. The geographical scope of the data covers sub Saharan African (SSA) countries. Table 3.1 presents the list of variables employed, definitions and sources covering the period of 2008 till date, as well as from IMF projections for up to 2022.

3.3 Methodology for Research Objectives 2, 3 and 4

Chapters 5, 6 and 7 are dedicated to achieving the **Research Objective 2** (i.e., *to investigate how institutional factors influence fiscal transparency in SSA*) **Research Objective 3** (i.e*., to investigate how political forces influence fiscal transparency in SSA*) and **Research Objective 4** (i.e., *to investigate how macroeconomic factors influence fiscal transparency in SSA*) respectively. The chapters entail an in-depth econometric analysis of the underlying drivers of fiscal transparency in SSA countries. It uses a dynamic panel data model to x-ray which and how institutional factors, political forces; and macroeconomics factors influences fiscal transparency in SSA countries.

Table 3.1: Variables, Definition and Sources

Variable	**Definition**	**Source**	Period
Overall Balance (fiscal balance) (as percentage of GDP)	Refers to net lending and borrowing, defined as the difference between revenue and total expenditure, using the IMF's 2001 Government Finance Statistics Does not include policy lending	IMF: Fiscal Monitor October, 2017	2008-2022
Overall debt (as percentage of GDP)	Gross debt minus financial assets corresponding to debt instruments. These financial assets are monetary gold and special drawing rights; currency and deposits; debt securities; loans, insurance, pensions, and standardized guarantee programs; and other accounts receivable.	IMF: Fiscal Monitor October, 2017	2008-2022
Annual Economic Growth	Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2010 U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products.	World Bank: African Economic Indicators	
ODA and Official Aid	Net official development assistance (ODA) consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients	World Bank: World Development Indicators 2017	
Country policy and institutional assessment (CPIA): Quality of budgetary institutions	Quality of budgetary and financial management assesses the extent to which there is a comprehensive and credible budget linked to policy priorities, effective financial management systems, and timely and accurate accounting and fiscal reporting, including timely and audited public accounts.	World Bank: Country Policy and Institutional Assessment (2017)	
CPIA: Transparency, Accountability, & Corruption in the Public Sector Rating	An assessment of the extent to which the executive can be held accountable for its use of funds and for the results of its actions by the electorate and by the legislature and judiciary, and the extent to which public employees within the executive are required to account for administrative decisions, use of resources, and results obtained. The three main dimensions assessed here are the accountability of the executive to oversight institutions and of public employees for their performance, access of civil society to information on public affairs, and state capture by narrow vested interests.	"	
CPIA: Public Sector Management & Institutions Cluster	The public sector management and institutions cluster includes property rights and rule-based governance, quality of budgetary and financial management, efficiency of revenue mobilization, quality of public administration, and transparency, accountability, and corruption in the public sector.	"	
Fiscal transparency in Africa (%)	This is a measure of the degree of public availability of budget information as measured by the Open Budget Index (OBI) derived from the Open Budget Survey	International Budget Partnerships,	2006-2017
general government revenue (percentage of GDP)	Revenue is cash receipts from taxes, social contributions, and other revenues such as fines, fees, rent, and income from property or sales. Grants are also considered as revenue but are excluded here.	Open Budget Survey: (2006-2015)	2008-2022

Therefore, Chapter 5, 6 and 7 contribute to the existing empirical literature on causes of fiscal transparency that thus far has only been based on cross-sectional analyses irrespective of its known weaknesses. Such prior studies include Andreula et al. (2009, Wehner and De Renzio (2013), Tekeng and Sharaf (2015), Khagram et al. (2013), De Simone et al. (2017) and Andreula and Chong (2015). Owen to the ***stand-alone essay format*** of our study, to avoid repetition, we present here the summary of the dynamic panel data employed in Chapter 5, 6 and 7. An in-depth explanation of the estimation technique, data employed and their measurements and sources are presented in the methodology sections of the respective empirical chapters 5, 6 and 7.

Why panel data? As highlighted by (Hsiao 2007), panel data econometric analysis comes with some advantages such as: augmenting (increasing) the variability of the data and hence permitting us to gain more degrees of freedom and hence more sample variability than cross-sectional data analysis. Similarly, as noted by Wooldridge (2010), whilst cross-sectional regression estimates might be biased owing to risk from omitted-variable bias, employing panel data allows for the control of unobserved time constant variables. As such, our hypothesis that there are associations between the underlying (institutional, political and macroeconomics) factors and the level of fiscal transparency in SSA countries is tested with the following panel data model.

$$FT_{it} = \beta' x_{it} + \varepsilon_{it}\ i = 1, \dots\dots N; \dots\dots\dots\dots, T \tag{3.1}$$

Where FT_{it} signifies fiscal transparency for country i at time t; x_{it} denotes a set of time varying as well as time invariant covariates; β denotes the associated vectors of parameters we intend to estimate. Our composite error term ε_{it} is given as $\varepsilon_{it} = \omega_i + \epsilon_{it}$, where ω_i represents the unobserved country specific effect and ϵ_{it}, is the idiosyncratic error term.

For chapter 5 (*i.e.* the empirical paper 1), the covariates include the institutional governance quality index (IGQI) which is constructed by the author from six institutional governance indicators, using a Principal Component Analysis (PCA). They include voice and accountability; political stability and absence of violence; government effectiveness; rule of law; regulatory quality; and control of corruption. These indicators are drawn from Kaufman *et al.* (2010) and published by the World Bank's (2016) Governance Indicators. **For chapter 6** (*i.e.,* empirical paper 2), our covariates consist of partisan fragmentation1; partisan fragmentation2; Checks and balances; Ethnofractionalisation; Civil law; Military; Natural Resource (as a percentage of GDP); Growth, Population Growth and Aid (as a percentage of GDP). We present detailed variable definitions in Table 6.1. **Lastly, for chapter 7** (*i.e.,* empirical paper 3), our covariates comprise of Trade Openness, *de facto* (actual) Capital Account Openness; *de jure* (formal) Capital Account Openness, Inflation, Overall Balance, Debt Service, Natural Resource Revenue (as a percentage of GDP), Civil law, Military personnel (as a percentage of labour force), Growth, Population Growth and Aid (as a percentage of GDP).

Notwithstanding its highlighted advantages, there are some concerns as regards the panel data model represented by Equation (3.1). First, the assumption that fiscal transparency responds to changes in the covariates instantly may not always be the case as it is probable for the covariates to affect fiscal transparency with some lags. Also, past level of fiscal transparency could potentially influence the subsequent fiscal transparency level. This concern is shared by De Renzio (2011), who argued that current levels of fiscal transparency influence future transparency levels given that part of the major preconditions by donor countries for future aid is an improvement by recipient countries on their current levels of budget transparency. Moreover, contemporary level of fiscal transparency usually leads to calls by civil society organisations (CSOs) for future improvements, especially in the light of SSA's poor fiscal transparency performance. Thus, we consider a dynamic panel data model that provides for partial adjustments as follows:

$$FT_{it} = \beta_{ft} FT_{i\,t-1} + \beta' x_{it} + \varepsilon_{it} \tag{3.2}$$

Where $FT_{i\,t-1}$ is the lagged dependent variable; and β_{ft} is the measure of the adjustment process, which is expected not to be greater than one (1). Thus, equations 3.1 and 3.2 denote the ***static and dynamic fiscal transparency models*** respectively.

For estimation, the static panel model may be disposed to challenges such as endogeneity and unobserved heterogeneity as well as cross-sectional dependence issues. Endogeneity problems could emanate from the institutional (independent) variables as well as from omission of other relevant variables from the model. Also, though SSA countries may be made up of sovereign states, there still exists the possibility of equal response from the countries to commons shock. This suggests that some of the institutional or socio-economic factors considered in the model and ultimately fiscal transparency may be correlated.

The dynamic panel model (Equation 3.2) is also disposed to some econometric challenges such as those underscored above. This is further made difficult by challenges posed by correlation between the lagged dependent variable and the error term, specifically with regard to the unobserved country-specific heterogeneity ω_i. The presence of the lagged dependent variables $FT_{i\,t-1}$ as one of the regressors in the model could lead to autocorrelation challenges in the model. As argued by Roodman (2009), given such situations, employing the OLS technique will yield biased and inconsistent estimates and it will be better to adopt the generalised method of moments (GMM) estimator over the ***FE*** and ***IV*** estimators. Also, as highlighted by Bond (2002), GMM estimator permits the consideration of the dynamic process and is very important for recovering consistent estimates of the parameters of interest. In this regard, to avoid results that are potentially biased, we adopt the Arellano and Bond (1991) GMM estimator as it controls for the unobserved country heterogeneity (country-fixed effect) and endogeneity (bi-directionality) of the explanatory variables as well as the lagged dependent variable, to estimate our dynamic model.

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CHAPTER 4
AN OVERVIEW OF FISCAL OUTCOME, FISCAL RULE AND FISCAL TRANSPARENCY IN AFRICA

4.1 Introduction

This chapter provides an overview of the outcome of fiscal policy implementation in sub-Saharan Africa from 2008 till date, as well as an IMF projection for up to 2022. This section will also serve as a cross-walk linking fiscal transparency to fiscal outcome by establishing the importance of fiscal transparency for the achievement of better fiscal outcome. Essentially, it will examine fiscal rules in SSA vis-à-vis the performance of fiscal outcomes such as fiscal deficits, debts, revenue and expenditure with a view to identifying the trend in their performance. It also localises the controllable causes of such trends. Crucially, this chapter will investigate whether or not fiscal rules have helped SSA countries to achieve better fiscal outcomes. The section will further explore key SSA's controllable fiscal governance indicators that can influence fiscal outcomes, particularly fiscal transparency. This is with a view of revealing the quality of fiscal transparency in SSA, and from existing literature, establishes the importance of fiscal transparency towards achieving better fiscal outcomes. Finally, this chapter serves as a precursor for a robust empirical analysis of the determinants of fiscal transparency in subsequent chapters. Thus, the main objective of this section is to establish the performance of fiscal outcome and the extent to which fiscal outcomes are determined by fiscal discipline (i.e. adherence to existing fiscal rules).

4.2 Background

Some of the serious economic challenges currently faced by SSA[7] economies include the absence of sound fiscal policy implementation, often characterised by poor fiscal outcomes (i.e. persistent and unsustainable deficits resulting in soaring debts), a weak fiscal policy framework and poor fiscal transparency. Generally, fiscal policy is crucial to economic development of any country. The influential work by Musgrave (1959) emphasised the threefold rationale for sound fiscal policy: promoting macroeconomic stability, efficient resource allocation, and solving problems of distributional disparities. Oates (1968) and World Bank (2012) also corroborated this rationale for sound fiscal policy implementation. Thus, any distortion to sound fiscal policy implementation could have a negative macroeconomic and sociopolitical impact.

[7] In the course of this research work, SSA will occasionally be used interchangeably with Africa.

Nonetheless, high and persistent fiscal deficits characterised by negative overall balance, coupled with soaring levels of public debt and a deluge of budget related scandals, seem to have become a common feature amongst SSA countries. Suffice it to say that fiscal deficits do not always connote poor macroeconomic management as they are sometime used as stabilisation tools. However, persistent *year-on-year* fiscal deficits could lead to unsustainable debt levels and a high cost of borrowing for the government, both of which are deleterious to the economy. This is particularly so when the borrowing to finance the deficit was mostly for consumption expenditure rather than capital expenditure which could place the economy on the path of economic growth.

A key measure of fiscal performance is the trend of overall balance and debts run by an economy vis-à-vis the targeted (budgeted) figures for each fiscal year. Most SSA economies had poor fiscal outcomes as typified by their mostly negative (deficit) overall fiscal balance for over a decade as represented in Table 3.1. The macroeconomic implication of persistent negative overall balances, otherwise known as fiscal deficits, is its corollary, the persistent impact on the debt level of the economy, as it will continually be forced to borrow to augment its budgetary revenue requirements. Persistent fiscal deficits and unsustainable debt thresholds have implications for long-term fiscal consolidation.

4.3 The role of fiscal policy in economic growth: implications of the various means of deficit financing

As highlighted by the IMF (2015), in a challenging economic environment, fiscal policy accompanied by good monetary policy can continue to play a critical role in sustaining aggregate demand and rebuilding confidence in an economy. This can be achieved via *a flexible* use of fiscal policy, which can support growth, whilst mitigating risk and ensuring medium-term sustainability. However, the degree and type of flexibility will depend on a host of factors such as the individual country's fiscal position, macroeconomic conditions and pertinent fiscal risks.

The nexus between fiscal policy and economic growth has received attention from academics and policymakers for quite some time. Generally, the smooth running of every economy is predicated on the optimal mix of fiscal and monetary policy (Lucas and Stokey, 1983; Alesina and Tabellini, 1987). The major policy objective of fiscal authority includes economic stability, a higher growth rate and employment. Its key instruments include countercyclical tax and spending, and it prefers a lower unemployment rate to a lower rate of inflation. A persistent fiscal deficit is expansionary and increases aggregate demand thus leading to a higher interest rate and higher prices, while a budget surplus is contractionary and lowers the aggregate demand, the interest rate and prices.

The 1980s saw many developing countries embarking on fiscal adjustment aimed at leading them out of economic crises. Easterly and Schmidt-Hebbel (1993) examined how financial markets, private spending and the external sector react to fiscal policies in ten developing countries. They

also examined the behaviour of holdings of money, public debt, investment, and the real exchange rate. Their study revealed strong evidence that money financing of the deficit begets higher inflation, while debt financing begets higher real interest rates or increased repression of financial markets. They concluded that private investment is sensitive to the real interest rate, which rises under domestic borrowing to finance the deficit. In sum, they concluded that fiscal deficits and growth are self-reinforcing as good fiscal management maintains access to foreign lending and avoids the crowding-out of private investment, while growth stabilises the budget and improves the fiscal position. The growth–good fiscal management circle is one of the strongest arguments for a policy of low and sustainable fiscal deficits (Easterly and Schmidt-Hebbel, 1993).

The germane question then becomes, how are deficits financed? The commonest way of funding budget deficits is via borrowing (domestically and externally). From a fiscal policy perspective, higher budget deficits will require higher taxes and borrowing in the future and may cause crowding out of private sector investment and consumption and thus dampen the rate of expansion in output (growth) in the long run. On the domestic front, fiscal deficits are most times financed via borrowing through government bonds or borrowing from the central bank via new money creation or via increased taxation (Carlin and Soskice, 2006).

As clearly pointed out by Carlin and Soskice (2006), the macroeconomic roles of government's fiscal policy include the planning and financing of government expenditure in ways that maintain a sustainable burden of public debt in the economy, the provision of automatic stabilisers that protect the economy to some degree from shocks to aggregate demand, and the stabilisation of output level around the equilibrium rate by employing discretionary changes in government expenditure and/or taxation. Blanchard (1985) reiterated this position by pointing out that fluctuations in the overall budget balance (the variance between revenue earned and spending) provides a good estimation of the short-term impact of fiscal measures on demand. Thus, the budget balance captures the difference between the resources deducted from private sector income (primarily via taxation) and what the budget contributes to aggregate expenditure in a given year. This is more so, because economic agents are forward looking. Fiscal policy can also affect aggregate demand via future anticipated deficits and public debt stock (Blanchard and Summers, 1984; Blanchard, 1985).

A robust study by Ndebbio (2004) on SSA not only reiterated the nexus between financial development and economic growth, it went further to identify and establish the link between financial development, fiscal policy performance and economic growth. Findings from the study attributed the low or negative growth of *per capita* output in SSA to a *shallow financial depth* – a phenomenon which implies the presence of a narrow range of financial assets for the country. The study suggested that alongside factors such as price stabilisation, removal of fiscal deficit and restrictions on financial institutions could make real money balances grow. It also went further to suggest that financial

intermediation/development could impact positively on growth if, among other suggestions, the volume of investment is increased.

Schmidt-Hebbel (1995) and Easterly and Levine (1994) both came to the conclusion that fiscal balance has been seen to have a positive effect on long-run growth, while fiscal deficit has a negative effect on growth. The debate on the relative effectiveness of fiscal or monetary policy in Africa has being going on for a while. UNECA (1989) attributed this debate to the peculiar presence of structural rigidities in SSA economies. Some of which include the presence of poor institutions, a very restricted production base, overdependence on external economies as well as a preponderance of the subsistent sector.

Using the Nigerian economy as a case study, Olaloye and Ikhide (1995) found that fiscal policy is more effective than monetary policy in getting the country out of economic depression. They anchored their finding particularly on the role played by government expenditure. The study concluded by recommending the need for government to formulate suitable policies as it pertains to its mix of current and capital expenditure, subsidies and transfers as well as the need to review its massive expenditure projects that are not productive. Although government can also raise revenue to offset its deficit through seigniorage, this approach is limited by the attendant inflation that usually accompanies it. This is usually not the most considered option given the political backlash that easily accompanies inflation before revenue from such a source is maximised. Thus, the most feasible option left to governments to cover gaps between government expenses and revenue is public debt. Governments of both high and low-income countries rely heavily on debt finance over the years, albeit with the attendant consequences given that, in most countries, servicing prevailing debt is mostly a first line charge on revenue (Bell, 2003).

The budget balance identity captures the difference between the resources subtracted from private sector income (largely via taxation) and what the budget contributes to aggregate expenditure in a given year. A declining budget balance reflects a positive fiscal contribution to aggregate demand and vice versa. For each fiscal period, the government must finance its expenditure plans and also pay interest on the government debt. This is captured in the government budget identity given by Equation 4.1:

$$\boldsymbol{G} + \boldsymbol{iB} \equiv \boldsymbol{T} + \boldsymbol{\Delta B} + \boldsymbol{\Delta H} \tag{4.1}$$

Where $\boldsymbol{G}$ is government expenditure, $\boldsymbol{i}$ is the nominal interest rate, $\boldsymbol{B}$ is the outstanding stock of bonds and thus the value of the national debt at the beginning of the period, $\boldsymbol{T}$ is Tax revenues net of transfers, $\boldsymbol{\Delta B}$ is the value of the new bonds issued in the current period, and $\boldsymbol{\Delta H}$ is the new high-powered money generated by the central bank (Carlin and Soskice, 2006). However, Ndebbio (2004) cautioned that such monetisation of fiscal deficit via sales of government securities to the central bank could be inflationary tax finance given that high-powered money has been made to increase.

4.4 Fiscal policy outcome in sub-Saharan Africa: deficit and debt profile

Fiscal outcomes do not necessarily turn out according to projections[8]. Fiscal policy performance is described as the deviations of fiscal outturns (i.e. deficit, Debt/GDP ratio) from the fiscal expectations at the time of the budget (Cebotari *et al*., 2009). This raises questions such as *what are the consequences of poor fiscal outcome? What are the endogenous (controllable) factors that cause such deviations from expectations? How can they be best addressed?* Theoretically, the major effect or economic consequence of increasing budget deficits include increased inflation owing to the increase in aggregate demand as an increase in fiscal deficit is mostly associated with expansionary fiscal policy, crowding out the private sector from borrowing from the domestic market and, by extension, potentially reducing the level of private investment and growth.

4.4.1 SSA overall fiscal balance

In public finance, the difference between government revenues and spending is referred to as the overall balance – a positive overall balance reflects government *budget surplus* while a negative balance indicates a *budget deficit.* Table 4.1 reveals that most SSA economies have run a deficit budget since 2008. In 2016, Angola, Congo DR, Ghana and Kenya recorded deficits of 13.5%, 12.9%, 8.9% and 8.7% respectively. These were almost thrice the national or supranational adopted fiscal rules and above the IMF recommended threshold. The IMF forecast for 2018 through 2019 to 2022 still portends a similar trend of persistent budget deficit for most African economies and by extension increasing debt stock from borrowing to finance deficits. Interestingly, data from Table 4.1 reveals that most countries that have a Fiscal Responsibility Act which stipulates that overall fiscal deficit in a fiscal year shall not exceed 3% of its GDP have not achieved this target in most of the years.[9] The situation is more worrying when even a more relaxed IMF benchmark, which stipulates fiscal deficit of 4% of GDP, is considered. Most SSA countries could still not achieve this in some fiscal years. This raises questions such as why are fiscal targets most times not achieved in Africa? Do these countries have institutionalised fiscal rules governing the budget process? If yes, why have such fiscal rules failed?

Deficit financing is not completely wrong as sometimes fiscal policies for growth and employment may cause governments to run a deficit. What is important is its impact. If deficit financing was to finance capital expenditure and thereby induce investment and growth, this will have a positive long-run impact on growth. If deficit financing is used to finance recurrent expenditure, this will dampen the rate of growth of the economy in the long run. However, in both scenarios, two germane questions or issues deserve attention. First, how is this deficit financed, especially in SSA where the financial markets are not well developed?

[8] In the course of this work, fiscal outcome, budget outcome and fiscal performance are used interchangeably.
[9] See Nigeria's Fiscal Responsibility Act (2007).

Table 4.1: SSA overall balance, 2008-2022 (percentage of GDP)

Country	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Angola	-4.5	-7.4	0.0	-0.1	-4.4	-0.4	-7.3	-15.3	-13.5	-3.2	-1.1	-0.5	0.1	0.2	0.3
Benin	-0.1	-3.1	-0.4	-1.3	-0.3	-1.9	-2.3	-7.6	-5.9	-6.1	-4.0	-1.9	-0.8	-0.2	-0.6
Burkina Faso	-4.1	-4.7	-3.0	1.4	-3.1	-4.0	-2.0	-2.2	-3.3	5.5	4.6	-3.0	-3.1	-3.0	-3.3
Cameroon	2.2	0.0	-1.1	-2.6	-1.6	-4.0	-4.0	-2.7	-6.1	-3.6	-2.8	-2.0	-1.6	1.4	-1.3
Chad	3.6	-9.2	-4.2	2.4	0.5	-2.1	-4.2	-3.1	-2.0	1.7	1.5	1.1	1.4	1.3	1.7
Congo DR	-0.5	-0.9	-1.0	-1.0	1.9	3.1	1.2	0.9	0.1	-0.3	0.6	0.9	1.0	1.0	1.1
Congo Republic	27.2	4.9	15.7	16.0	7.3	-4.5	-11.3	-41.7	-12.9	-1.8	3.8	4.6	4.9	5.6	4.1
Côte d'Ivoire	-0.4	-1.4	-1.8	-4.0	-3.1	-2.2	-2.2	-2.9	-4.0	-4.5	-3.7	-3.0	-3.0	-2.9	-2.9
Ethiopia	-2.9	-0.9	-1.3	-1.6	-1.2	-1.9	-2.6	-1.9	-2.4	-2.4	-2.5	-2.7	-2.8	-3.0	-2.9
Ghana	-8.0	-7.2	-10.1	-7.4	-11.3	-12.0	-10.9	-5.4	-8.9	-4.5	-3.7	-3.2	-3.1	-2.9	-2.8
Guinea	0.4	-4.9	-9.6	-0.9	-2.5	-3.9	-3.2	-6.9	-0.1	-0.5	-1.9	-1.9	-1.8	-1.8	-1.8
Kenya	-3.4	-4.3	-4.4	-4.1	-5.0	-5.7	-7.4	-8.1	-8.7	-8.4	-6.6	-5.6	-4.1	-3.1	-3.0
Madagascar	-2.0	-2.5	-0.9	-2.4	-2.6	-4.0	-2.3	-3.3	-1.3	-5.1	-4.7	-4.5	-3.8	-3.5	-3.3
Mali	-2.0	-3.7	-2.6	-3.4	-1.0	-2.4	-2.9	-1.8	-3.9	-8.5	-3.3	-3.0	-3.0	-3.0	-3.0
Mozambique	-2.1	-4.9	-3.8	-4.8	-3.9	-2.7	-10.7	-7.2	-5.7	-7.3	-7.0	-5.5	-4.5	-3.4	-2.8
Niger	1.5	-5.3	-2.4	-1.5	-1.1	-2.6	-8.0	-9.1	-6.2	-7.5	-6.2	-4.8	-2.9	-0.8	0.0
Nigeria	5.7	-5.4	-4.2	0.4	0.2	-2.3	-2.1	-3.4	-4.7	-5.0	-4.5	-4.3	-3.8	-3.7	-3.6
Rwanda	0.9	0.3	-0.7	-0.9	-2.5	-1.3	-4.0	-2.8	-2.3	-1.9	-2.1	-2.0	-1.5	-1.0	-0.9
Senegal	-4.4	-4.6	-4.9	-6.1	-5.2	-5.5	-5.0	-4.8	-4.2	-3.7	-3.0	-3.0	-3.0	-3.0	-3.0
South Africa	-0.7	-5.3	-4.9	-3.9	-4.4	-4.3	-4.2	-4.6	-4.0	-4.5	-4.3	-4.3	-4.2	-4.1	-3.8
Sudan	0.6	-4.2	0.2	0.1	-3.3	-2.3	-1.4	-1.9	-1.8	-2.4	-2.6	-2.8	-3.0	-3.1	-3.6
Tanzania	-1.9	4.5	-4.8	-3.6	-4.1	-3.9	-3.0	-3.3	-3.1	-3.4	-4.3	-4.6	-4.1	-3.3	-2.6
Uganda	-2.6	-2.1	-5.7	-2.7	3.0	-4.0	-4.7	-4.6	-3.9	-3.2	-4.9	-4.8	-4.9	-1.2	-0.9
Zambia	-0.7	-2.1	-2.4	-1.8	-2.8	-6.2	-5.7	-9.3	-5.8	-8.0	-7.8	-7.2	-6.5	-5.3	-4.3
Zimbabwe	-2.0	-2.0	0.7	-0.5	0.0	-1.7	-1.4	-1.0	-8.4	-5.1	-3.4	-3.2	-3.3	-3.3	-3.1
SSA	2.4	-4.1	-3.6	-1.0	-1.3	-3.2	-3.3	-4.1	-4.8	-4.6	-4.1	-3.8	-3.4	-3.0	-2.8

Table 4.2: SSA overall debt, 2008-2022 (percentage of GDP)

Country	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Angola	16.6	22.7	44.3	33.8	29.5	32.9	40.7	65.4	75.8	65.1	66	67.1	66.9	66	66.1
Benin	25	25.6	28.7	29.9	26.7	25.3	30.5	42.4	50.3	53.4	53.6	51.5	47.6	44	40.6
Burkina Faso	25.6	29.1	30.7	28.1	28.2	28.8	30.6	33.4	35.7	36.5	37.7	37.3	37	36.7	37
Cameroon	9.7	10.1	11.5	13.2	15.4	19	26.2	34.2	35.2	35.7	35.4	35	33.9	32.5	30.9
Chad	19.9	31.6	30.1	30.6	28.8	30.5	39.4	43	51.2	46.6	43.3	39.2	34.5	30.4	29.1
Congo DR	73.8	84.5	30.9	24.5	22.7	20	17.5	16.1	16.8	17	15.8	14.5	13.3	12	11.2
Congo Republic	79.3	63.3	22.3	23.8	28.6	34.2	46.8	96.3	115	117.7	116	111.1	102.4	88.8	81.9
Côte d'Ivoire	70.8	64.2	63	69.2	45	43.4	44.8	47.8	48.7	48.7	48.3	47.1	46.5	45.9	45.5
Ethiopia	41.7	37.8	40.5	43.9	36.9	42.4	46.3	60	57.9	59.7	59.1	58.3	56.9	55.8	55.1
Ghana	33.6	36.1	46.3	42.6	47.9	57.2	70.2	72.2	73.4	70.5	66.1	62.8	60.1	57.6	55.1
Guinea	58.5	61.3	68.8	58.1	27.2	34	35.1	42.1	42.9	42.9	47.2	48.3	47.6	45.5	43.7
Kenya	41.5	41.1	44.4	43	43.9	44	48.6	51.6	52.6	56.2	56	52.5	51.4	48.7	46.6
Madagascar	31.5	33.7	31.7	32.2	33	33.9	34.7	35.5	38.7	41.9	42.8	43.7	43.4	42.8	41.9
Mali	20.3	21.9	25.3	24	25.4	26.4	27.3	30.7	35.9	34.7	35.5	36.9	38.4	39.8	41.1
Mozambique	36.3	41.9	43.3	38	40.1	53.1	62.4	88.1	113.3	88.2	85.6	82	78.8	73.8	65.6
Niger	21.1	27.7	24.3	27.8	26.9	26.3	32	41	46.3	51.5	52.8	53.8	52.1	49.8	47.5
Nigeria	7.3	8.6	9.6	12.1	12.6	12.4	12.5	13.2	17.6	21.3	22.8	23.8	24.3	24.8	25.2
Rwanda	19.5	19.5	20	19.9	20	26.7	29.1	33.4	37.6	40.2	42.1	44.1	44.3	43.7	42.9
Senegal	23.9	34.2	35.5	40.7	42.8	46.9	54.4	56.9	60.6	61.1	59.9	58.1	56.4	54.8	53.6
south Africa	26.5	30.1	34.7	38.2	41	44.1	47	49.3	51.7	53	55.6	57.1	58.1	58.8	59.2
Sudan	68.8	72.1	73.1	70.6	94.5	89.9	77.3	72.6	66.5	53.5	47.9	44.1	41.6	39.4	37.6
Tanzania	21.5	24.4	27.3	27.8	29.2	30.9	33.8	36.7	37.2	37.4	38.3	39.5	40.3	40.8	41
Uganda	20.3	19.2	22.4	23.4	24.5	27.6	30.7	33.3	37.3	38.6	39.9	41.3	41.6	41.2	40
Zambia	19.2	20.5	18.9	20.8	25.4	27.1	35.6	61.4	60.5	55.6	60	62.4	63.3	63.7	62.8
Zimbabwe	68.6	51.4	59.3	41.6	38.4	48.3	49.6	51.9	69.7	70.7	68.5	67	68.4	69.9	71.8
SSA	21.8	23.7	22.2	23.1	22.7	24.1	25.9	30.6	36	38.6	38.6	38	37.6	37.3	37

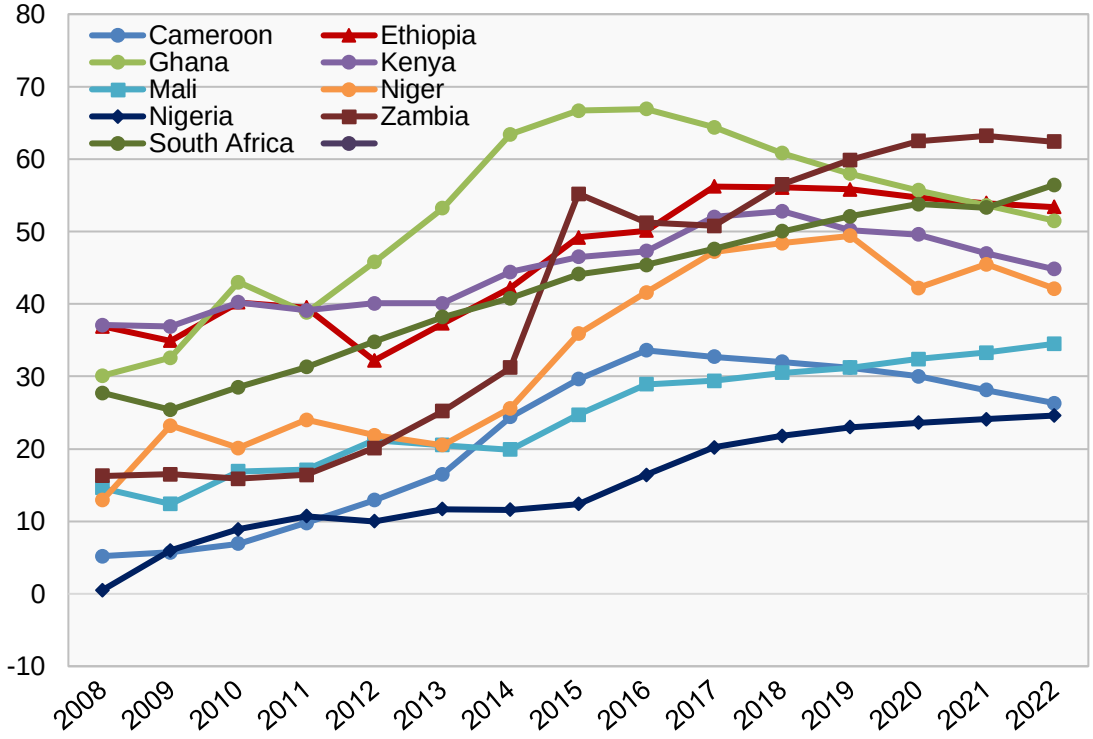
Source: Computed by the author based on data from IMF Fiscal Monitor October, 2017

Secondly, and worthy of note, is why have resource-rich countries such as Angola, Congo DRC and Nigeria posted some of the highest levels of fiscal deficits in some of the years? This may point to the issue of spending inefficiency, a pointer to institutional strength or challenges.

4.4.2 Fiscal balance and the evolution of debt in SSA

One of the major outcomes of the fiscal balance alluded to earlier is the growing trend in debt in many SSA economies. Available data for some SSA countries represented in Figure 4.1 reveals an ominous debt stance for SSA economies. It depicts a worsening net debt as a percentage of GDP between 2008 and 2022. The projection for 2019-2022 may see slight ebb in the ratio of net debt to GDP, but these forecasts will still be worse than the situation was prior to 2008. Rising debt as a percentage of GDP portends an increasing burden on future generations. In 2017, Congo DR and Mozambique recorded a Debt-GDP ratio of 117% and 88.2% respectively (see Table 3.2). SSA's composite gross Debt-GDP ratio is projected to rise from about 21.8% in 2008 to 37% by 2022 (IMF, 2017). By 2016, countries such as Burkina Faso, Congo DR, Ethiopia, Ghana, Kenya, Mozambique, Niger, Senegal, South Africa, Sudan, Zambia and Zimbabwe had crossed the 50% threshold of debt to GDP.

Figure 4.1: Net debt trend (% of GDP) in some SSA countries 2008-2022



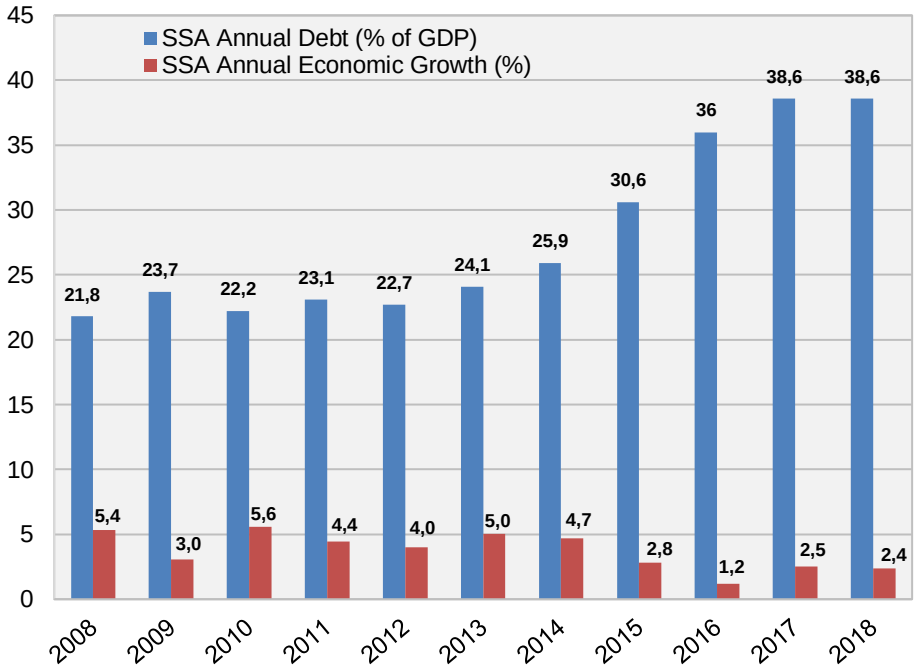
Source: Computed by the author based on data from IMF Fiscal Monitor October, 2017

An examination of the gross Debt-GDP ratio reveals the same worrying upward trend of Debt-GDP ratio in SSA countries. As highlighted in Chapter 1, there are worries that SSA economies may slide back into the pre-HIPC debt overhang era. The anticipated debt-service costs would discourage

further domestic and foreign investment and harm economic growth (Krugman, 1988; Sachs, 1989; Patillo *et al*., 2002). The exact nature of the nexus between debt and economic growth is shrouded in controversy in the economics literature. However, what we do know is that beyond a certain debt threshold, economic growth begins to contract, especially owing to increasing debt service and the consequent less public investment.

In Figure 4.2, we present the trend of average and median annual GDP growth rates relative to the level of debt to GDP ratio for all African countries covering the period 2008-2018 based on data from the African Development Indicators. It can be observed that when debt to GDP ratio was about 20%, both median and average annual GDP growths were relatively higher compared to when debt to GDP ratios were higher than 20%.

Figure 4.2: Economic growth and debt for Africa, 2008-2018

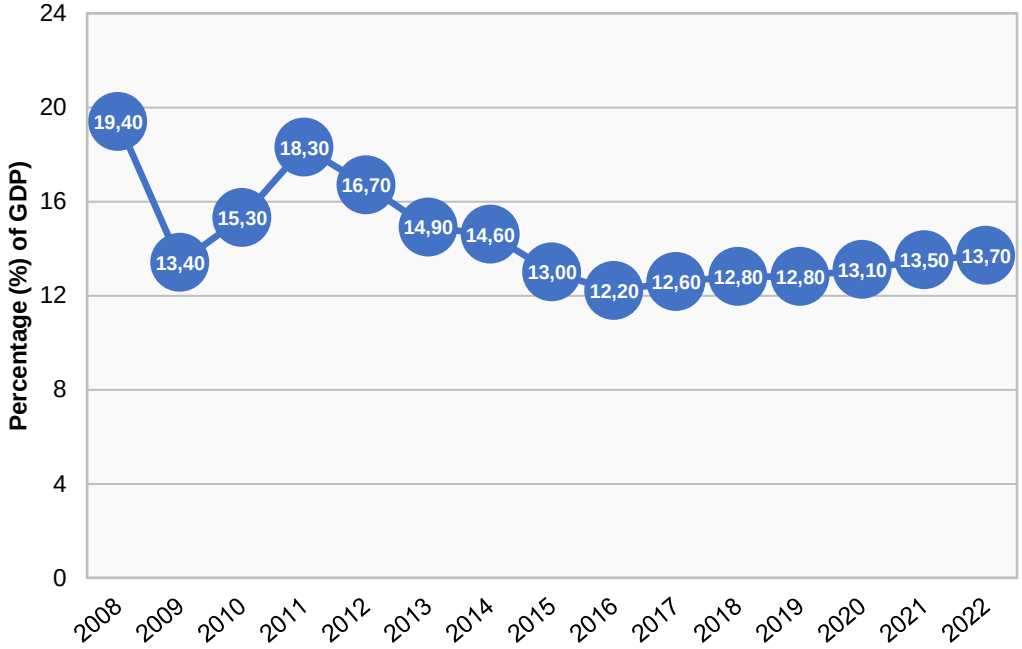


Source: Computed from African Economic Indicators

4.4.3 SSA revenue structure

Between 2008 and 2017, SSA's revenue trajectory, represented in Figure 4.3, has generally been on a decline, dipping from 19.4% in 2008 to 12.6% in 2017. IMF (2017) projections for 2018-2022 do not reflect a significant change. Table A.1 of the Appendix provides a vivid *country-by-country* basis statistics. Apart from Mali and Zimbabwe, all other SSA countries are projected to be worse off by 2022 than they were during the baseline year of 2008 in terms of their revenue. Only very few countries like Ghana and Angola are expected to have better revenue by 2022. Particularly bad cases are Nigeria and Sudan – both countries may see their revenues drop from 20.1% and 24% to 6.8% and 7.6% respectively. Such a phenomenal drop in revenue may be understandable in the case of Sudan, with the independence of the oil rich South Sudan from Sudan in 2011.

Figure 4.3: SSA revenue (% GDP) profile



Source: Computed by author based on IMF (2017) fiscal monitor statistics

However, in the case of Nigeria, there is need for further investigation, especially in terms of transparency and accountability in revenues from the oil and gas sector of the country. Recall that total deficit in a given fiscal year ($deficit_t$) is defined as

$$Deficit_t = r * Deficit_{t-1} + G_t - T_t \tag{4.2}$$

where r represents interest payment on the outstanding debt, G_t represents government expenditure and T_t is the tax revenue. From the foregoing identity, if tax revenue declines, then the total deficit is likely to increase. Between 2008 and 2018, SSA's revenue had dropped by over 34% with no strong projection of a return to pre-2008 revenue levels. Why has SSA's revenue trajectory witnessed a dip for quite some time? This can be attributed to a lot of germane emerging factors.

First is the over-reliance on resource-based taxes in resource-rich countries. Non-resource tax revenues are particularly low in some resource-intensive economies. The excess reliance on resource revenues exacerbates the effect of declines in commodity prices on economies such as Nigeria and Angola. Also, there are serious structural constraints which creates fiscal space challenges. for example, in SSA it may be difficult to increase taxes beyond what the current levels are for developing countries and thus, such governments are left with a small window of financing deficits. Another factor is the impact of trade liberalisation (abolition of tariffs and non-tariff barriers). Given the high share of trade taxes in poorer countries, such abolition of tariffs could impede revenue generation. Furthermore, the erosion of the already shallow tax base by excessive granting of tax preferences, inefficient taxation of activities in the extractive industry, coupled with inability to fight abuses of transfer pricing by multinational enterprises (MNEs) only worsens the situation. This is in addition to institutional weaknesses such as poor tax revenue administration functions –

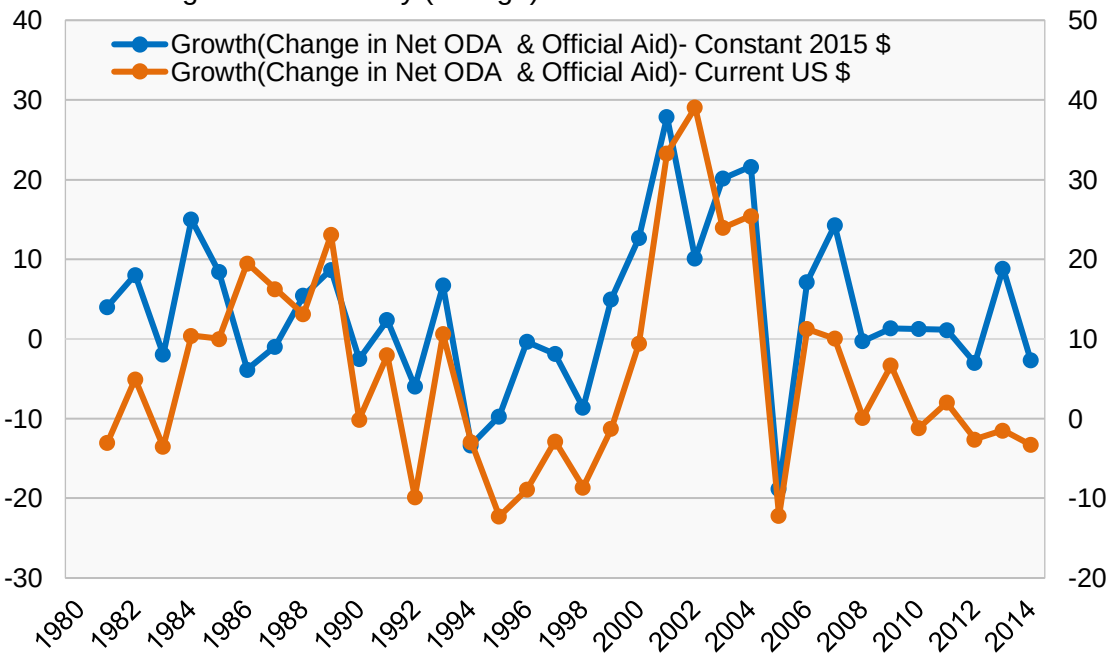
administrative organisation, taxpayer identification and registration, filing, revenue controls and post-filing arrangements – resulting in poor tax mobilisation efforts.

4.4.4 Foreign aid and fiscal deficit in Africa

Some SSA countries articulate foreign aid into the government budget revenue framework.[10] However, with the graduation of many SSA states from low income to middle- and upper-income countries, access to foreign aid for such countries is reduced. Other factors that may have affected SSA's revenue outcome include volatilities in its receipt of official aid. Statistics from the World Development Indictors (2017) represented in Figure 4.4 reveals that SSA experienced negative change in its receipts of Official Development Aid (ODA) in some periods. This could be attributed to donor fatigue as outlined by earlier studies. The impact of this could be felt more by countries such Tanzania, Uganda, Kenya whose annual budgets rely heavily on ODA and Official Aid.

According to IMF (2017), as at 2012 fiscal year, both Tanzania and Uganda had a 39% share of external aid as a percentage of GDP. The volatility in foreign aid received by African countries may also not be unconnected with the emerging trend of increase in donor conditionalities for fiscal transparency as a condition for giving aid (Mills, 2013).

Figure 4.4: Volatility (change) in SSA net ODA and official aid



Source: World Development Indicators 2017

4.4.5 Foreign aid, tax leakages and corruption

Studies have linked countries' ability (or inability) to efficiently mobilise domestic resources to high levels of corruption. Friedman *et al*. (2000) pointed out that excessive corruption levels lower tax

[10] Our discussion focuses on foreign aid and not Official Development Assistance (ODA).

revenue to GDP ratio.[11] This is highly pertinent to the SSA situation as most of them rely heavily on international trade taxes which are often fraught with corruption. Customs and excise duties collection is couched in corruption in many of these countries (UNECA, 2016).

4.4.6 Findings on the cross-over between fiscal outcome and institutional weakness

From the foregoing, it is evident that most SSA economies experience a poor fiscal outcome in terms of fiscal deficits, debt and revenue. This reinforces questions asked earlier such as what are the causes of poor fiscal performance in Africa and how can they be addressed against the backdrop of the prevailing evidence of inconsistencies between growth rate and tax revenue, fluctuations and sometimes decline in official aid due to aid fatigue, the absence of strong fiscal rules, poor transparency and efficiency in the management of official aid that is manifest in SSA? It can be inferred that poor fiscal outcomes in Africa may be caused by factors such as unrealistic budget and expenditure assumptions, inefficiency and leakages in the tax system or other institutional factors such as corruption and the rent-seeking nature of most SSA economies. Thus, there is a need for SSA economies to realign their expenditure pattern to reflect this declining revenue projection in a more transparent manner so as reduce the level of deficits.

Recent studies, though not on SSA, by Dabla-Noris *et al*. (2010) as well as that by Rajkumar and Swaroop (2008) found a nexus between fiscal outcome, governance and institutions. As earlier highlighted, Africa's poor fiscal policy outcome can be traced to both exogenous and endogenous factors. Whereas the exogenous (non-controllable) factors, such as volatility in export commodity (e.g. oil and agriculture) prices and the impact of environmental elements (including drought), are crucial to SSA's revenue structure, this study focuses on controllable factors such as fiscal rules and fiscal transparency which have been less researched in the various African countries.

4.5 Governance institutions and fiscal rules

As earlier highlighted, the current debates on factors influencing fiscal policy outcomes have gradually shifted towards controllable factors. Most of these factors fall under the scope of economic governance and the quality of budgetary institutions in a country. Although a very eclectic concept, World Bank (2007) described good governance as typified by predictable, open (i.e. transparent) and enlightened policymaking processes, a bureaucracy that is imbued with a professional ethos, an executive arm of government that is accountable for its actions, and a strong civil society that partakes in public affairs, and all behaving under the rule of law.

Increasingly, in SSA countries, the role of governance and institutions are beginning to gain traction in economic discourse and on the outcome of fiscal policy implementation. However, our major

[11] The tax revenue to GDP is the ratio of total tax collected compared to Gross National Product.

preoccupation is firstly to conceptually understand the notions of institutions and governance as well as their emerging role in effective fiscal policy management (i.e. fiscal governance). As defined by North (1990: p.1), “institutions are humanly devised constraints (formal and informal) that structure political, economic and social interaction. They consist of sanctions, taboos, customs, traditions and codes of conduct”. In essence, they can be described as the rules (formal and informal) of the game which affects economic incentives and behaviour. As clearly highlighted by Williamson (1985), the key focus of the literature on institutions and transactions cost is based on institutions as efficient solutions to problems of organisations in a competitive framework. It can be rightly argued that institutions are therefore not organisations – they transcend organisations as they entail the presence of the organisations and the totality of what it takes to run them efficiently.

Dovetailing from the broad definition of institutions to why they are vital for fiscal policy outcome, fiscal institutions too have received attention from scholars as well policymakers. As defined by Gollwitzer (2010: p.1), “fiscal institutions comprise the policies, rules, and procedures of the public revenue and expenditure process; thus is the most important macroeconomic commitment to institutions for government”. Alesina and Perotti (1996) defined fiscal institutions as all the rules and regulations according to which budgets are drafted, approved and implemented. From a formal perspective, budgetary institutions and processes fulfil numerous vital functions (Shah *et al*., 2007) such as:

i. Setting priorities in the allocation of public resources,
ii. Planning to achieve policy goals,
iii. Establishing financial control over inputs to ensure compliance with rules,
iv. Managing operations with fiscal prudence, efficiency and integrity, and
v. Ensuring accountability to taxpayers.

Nonetheless, the situation in Africa is quite different. Shah *et al.* (2007) pointed out that budgetary processes and institutions in Africa are yet to be adequately developed to deliver on the above-identified functions given their misplaced emphasise on work mostly as a way of legalistic control. Shah *et al*. emphasised the need for reform of these institutions as this is crucial to enhancing service delivery by the government as well as reinforcing citizens’ oversight on the operations of the government. However, it is imperative to point out that citizens’ oversight ability is predicated on the level and quality of information made available to it. Killick (2005), on the budgeting system in Ghana, reveals issues that are not so different from other SSA countries’ experience. The study revealed evidence of a poorly performing budget system characterised by frequent discrepancies between budget estimates and actual spending.

Dabla Norris *et al.* (2010) and Gollwitzer (2010) highlighted the importance of institutions in the budgeting process. These studies focused on SSA economies and revealed a wide variance in

institutional quality across the African continent. It also revealed that strong budget institutions help enhance fiscal balances (higher primary budget balance) and lower public external debt outcomes.

4.6 Fiscal rules and fiscal discipline in sub-Saharan Africa

Amongst the key public finance problems faced by most SSA countries is the spiraling and unsustainable upward trend of deficits and debts. To address these challenges and ensure fiscal discipline, many SSA countries have adopted some form of national or supranational numerical fiscal rules. Fiscal rules can be described as permanent constraints on fiscal policy via simple numerical limits on budgetary aggregates (IMF, 2009). As highlighted by Mabugu and Marinkov (2013), the success of fiscal rules in delivering the expected fiscal outcome is predicated on the adopting of an easy to understand fiscal indicator which can also be easily scrutnised and publicized. They are largely employed with the view to achieving fiscal sustainability. They can also be employed in stabilising the economy as well as in shrinking or enlarging the size of government.

In an attempt to realise their sustainable public finance objectives, including sustainable debt levels and less persistent fiscal deficits, most SSA countries adopted some form of fiscal rule, or in some cases a combination of fiscal rules. The aim of such fiscal rules is to forestall fiscal indiscipline and return these countries towards sustainable public finances. This development has increased the demand for some form of institutional response, hence the emergence of fiscal rules as institutional innovations with the goals of promoting fiscal prudence and ensuring balanced fiscal policies in the last decade. As detailed by Cangiano *et al.* (2013.p80), fiscal rules or fiscal responsibility laws as they are sometimes referred to as “legal frameworks that embed in law an agreed set of policies, processes or arrangements intended to improve fiscal outcomes, discipline, transparency and accountability by requiring governments to commit to fiscal policy objectives and strategies that can be monitored”. Such legal frameworks can thus be a component of the budget laws albeit such laws have to cover a wider scope bordering on the entire public finance management systems and processes as they assist countries to maintain fiscal discipline. Hence, they connote a long-lasting restraint on fiscal policy via numerical limits on budgetary aggregates with the implication that such fiscal policy parameter boundaries are not frequently altered (Bova *et al*., 2015).

Fiscal rules have increasingly been recognised as important tools to promote sound fiscal policies. By constraining discretion, fiscal rules enhance fiscal discipline and make fiscal policy more predictable. In particular, fiscal rules can help governments establish fiscal targets that support fiscal sustainability. IMF (2009) summarised the different types of fiscal rules into the following:

i. Budget balance rules. These can be predicated on the overall balance, the structural balance or cyclically adjusted balance,
ii. Debt rules. These aim at achieving a certain threshold of debt to GDP ratio. It is effective in achieving the goal of debt convergence.

iii. Expenditure rules. These put boundaries on total, primary or current spending (i.e. spending of the ordinary state budget plus spending of the public investment budget) in relation to GDP.
iv. Revenue rules. These aim at boosting revenue and/or preventing a tax burden.

4.6.1 Performance of fiscal rules in Africa

How effective have fiscal rules been in helping SSA countries overcome poor fiscal outcomes? Following a cursory investigation of Table A.2 on fiscal rules in Africa (see Appendix), vis-à-vis Tables 4.1 and 4.2, i.e. performance of fiscal outcome (deficit or overall balance and debt) in SSA, several inferences can be deduced on how SSA's attempt at fiscal discipline or desire to achieve better fiscal outcome has performed. Generally, the last 10 years reveals that despite the adoption of fiscal rules, most SSA countries were unable to achieve fiscal outcomes (fiscal deficits and debts) that were within the stipulations of their adopted fiscal rules. This has been examined by Rodrik (1998), Mosley (2005) and Cangiano *et al*. (2013). An in-depth breakdown of fiscal discipline based on regional adopted supranational convergence criteria is provided below.

4.6.2 Fiscal rules and fiscal outcomes in Africa

First, upon in-depth examination of the enforcement of *fiscal rules and fiscal outcome in Africa* (Table A.4), it can be observed that most African countries have one or another form of numerical fiscal target rules to guide the management of their public finances. Most of these countries belong to regional monetary unions which have *supranational fiscal rules*[12] and *fiscal convergence criteria* as can be seen in Table A.2. One of the earliest templates for such rules and convergence criteria is the *Maastricht Treaty*. In a bid to avoid the need for bail-out of member countries by the European Central Bank owing to deficit spending, the treaty required that European Monetary Union (EMU) member countries avoid excessive deficits. Excessive deficits were defined by the treaty as deficits exceeding 3% of GDP. The 1997 stability and growth pact signed in Amsterdam strengthened the initial provision of the treaty by adding a quasi-automatic review process with financial fines imposed on member countries with excessive deficits (Poterba and von Hagen, 1999). Between 2000 and 2008, several economic communities in Africa began replicating such supranational fiscal rules, albeit with very little success as shown in their fiscal outcomes both in terms of deficits and debt. It may suffice to point out that supranational fiscal rules have their limitations on member states' ability to achieve an optimal mix of fiscal and monetary policy as the Eurozone financial crises exposed in Greece, Portugal and Spain.

[12] Supranational rules are the fiscal convergence criteria agreed upon by a Monetary Union or an Economic Community whose ultimate goal is to transform into a Union e.g. the West African Economic and Monetary Union (WAEMU).

The West African Economic and Monetary Union (WAEMU) is one of the regional economic communities in Africa. The WAEMU countries are Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo. Its 1st order convergence criteria on balanced budgets require that overall fiscal deficit (including grant) remains below 3%. From our findings, most of the countries under WAEMU could not balance their budget in large parts of the last 4-5 years, not even on their adopted convergence criteria of 3% (see Tables 4.1, 4.2 and A2). A major institutional weakness of the WAEMU is the vagueness of special circumstances for exemption as contained in its Article 71. This provides leeway for member countries not to be exempted from satisfying their obligation of meeting part or all of its convergence criteria. An IMF (2013) study of WAEMU called for strengthening of the WAEMU framework as well as addressing some of its nebulous special circumstances so as to ensure compliance by member states.

The East African Monetary Union (EAMU) and other African economic integrations have a similar convergence criterion to WAEMU of overall fiscal deficit (including grants) remaining below 3% of GDP and a 50% ceiling on gross public debt. These rules came into effect in 2013 with a view to securing convergence by 2020/2021. Table 4.1 also reveals that most EAMU member states have in the last four years posted fiscal deficit figures higher than their projected convergence figure. The Economic and Monetary Community of Central African (CEMAC)[13] is not doing any better. Nigeria has its own national Fiscal Responsibility Act (FRA, 2007) which was passed in 2007. It stipulates that on a given fiscal year, the Deficit-GDP ratio should not exceed 3%. However, as Table 4.1 reveals, Nigeria has breached the Act several times without any sanctions on the key macro-economic management team or officials responsible for implementation of the FRA (2007).

4.6.3 Medium Term Expenditure Framework (MTEF) as fiscal rules in SSA

The last ten to fifteen years have seen most African countries embarking on a series of budgetary reforms. A key component of these reforms was the adoption of the Medium-Term Expenditure Framework (MTEF), also known as the Medium-Term Budget Framework (MTBF). Though a broader definition, the MTEF is a set of institutional arrangements for prioritising, presenting and managing revenue and expenditure over a period of three to five years (Harris *et al*., 2013; Brumby and Hemming, 2013). A comprehensive MTEF must have an explicit limit on total expenditures and the budget deficit for each year. One fiscal policy area where the quality of a country's fiscal institutions and performance of the entire governance actors can easily be scrutinised is the MTEF. Given the cyclical nature of the budget process and the vulnerabilities to both exogenous and endogenous shocks, most countries in developing countries have embraced the MTEF with a view to putting in

[13] CEMAC is taken from its French interpretation: Communauté Économique et Monétaire de l'Afrique Centrale.

place a key institutional and governance framework that will ensure fiscal discipline and hence macroeconomic stability.

A key feature of the MTEF is the constraints it fixes on budget decisions – fiscal targets. This is coupled with its provision of procedures to ensure that policy changes are in line with budget constraints. Allen *et al*. (2017) assessed the effectiveness of MTEF in achieving fiscal discipline and resource allocation certainty of funding in six SSA countries. The study revealed that in most countries, though there were early successes, these were not sustained and budgetary outcomes did not improve. The lack of success was largely attributed to the fact that the reforms were not supply driven and partly due to technical issues such as poor data coupled with an inadequate forecasting methodology. This reinforces the need for country ownership of reforms. Moreover, MTEF data on most of these countries (Table A.3) in the Appendix raises more institutional questions than it answers. More worrying is the fact that for some of the countries, such as Namibia, Tanzania and Zambia, the legislature did not need to approve the budget ceilings. This begs questions such as: What is the role of the Parliament in the Medium-term Budget Strategy for such countries? Is the over-reliance on very volatile foreign aid by countries such as Tanzania, Uganda and Zambia as a share of their federal government expenditure sustainable? Finally, some countries (e.g. Tanzania) are not obliged to publish MTEF, thus creating room for a shroud of opacity (i.e. less transparency) in the budgeting process. Tanzania's fiscal transparency score of 8% and ranking of 93rd in the global fiscal transparency ranking in 2017 (see OBI, 2017) confirms this stance; because poor fiscal transparency cannot yield fiscal discipline or better fiscal outcome even if there were fiscal target rules.

4.6.4 Summary of findings on fiscal rules in Africa

African countries formed the bulk of the beneficiaries of the HIPC initiative as highlighted earlier. Efforts by the SSA countries to address their poor fiscal outcomes via the adoption of fiscal rules have not yielded the desired result as is evidenced from our background study. Why have such efforts not yielded the desired sustainable better fiscal outcome? A cursory examination of Tables 4.1 and 4.2 from the IMF (2017) overall fiscal balance and debt statistics reveals that the majority of SSA countries have numerical fiscal rules. However, when examined vis-à-vis their fiscal outcome performance, the results show a lack of fiscal discipline in most years as these numerical fiscal rules have failed to produce the desired or targeted fiscal outcome. This begins to provide some insights for questions such as why fiscal rules have failed in Africa.

4.7 Fiscal outcome and fiscal rules in SSA: the need for fiscal transparency

According to World Bank (2003), poor management of the budget is mostly responsible for the challenges faced by government in developing countries in terms of translating public spending into effective services. Rajkumar and Swaroop (2008), World Bank (2003) and World Bank (2007)

analysed the nexus between governance and public spending outcomes. Rajkumar and Swaroop (2008) argued that merely allocating public resources to the appropriate goods and services may not yield desirable outcomes if budget institutions involved in budget formulation, execution and monitoring malfunction. Amongst the key measures of good economic governance is transparency (fiscal transparency for the purpose of our study). Transparency on fiscal risk is crucial to managing risks, reduce cost of borrowing and improving economic efficiency.

Transparency helps to ensure that risks are recognised in good time and properly managed to promote earlier and smoother policy responses as well as strengthening accountability and risk management. Some cross-country studies e.g. Glennerster and Shin (2008) and Hameed (2005) revealed evidence that suggests that fiscal transparency is associated with better sovereign bond ratings and greater access to international capital markets. Kilpatrick (2001), Alt *et al*. (2006) and Alt and Lassen (2006) also found a positive link between fiscal transparency and better fiscal outcomes.

Schiavo-Campo (2007) tied up the governance links and how they influence the entire budget process and rules from formulation stage through implementation to oversight stage on four pillars: accountability, transparency, predictability, and participation**.** Accountability entails the capacity to call public officials to task for their actions. Transparency entails low-cost access to relevant information. Predictability results primarily from laws and regulations that are clear, known in advance, and uniformly and effectively enforced. And participation is needed to generate consensus, supply reliable information, and provide a reality check for government action. However, it is pertinent to point out that a crucial basis for good public participation is a well functional local government. Possibly one of the biggest institutional weaknesses in most African countries is the level of and volume of skilled personnel at the local government level.

4.8 The quality of budgetary institutions in Africa

The notion of good governance is eclectic and multifaceted. Implicit in the various descriptions of elements of good governance is the role of transparency and accountability as part of a broader description of institutions. For over a decade, empirical papers (Islam, 2003; Hameed, 2005; Tekeng and Sharaf, 2015) have identified the significance of fiscal transparency as a feature of efficient fiscal policy as well as a good measure of economic and public governance. Fiscal transparency is a specific element of governance from the broad literature on governance measuring the quality of government. Institutional weaknesses have mostly been identified as one of the key causes of poor economic growth in developing countries (Prakash and Cabezon, 2008). Unsurprisingly, most African countries rank abysmally low in most institutional and governance ranking as presented in Table 4.3.

Table 4.3: Country policy and institutional assessment (CPIA) of budgetary institutions

Year	CPIA Public Sector Management and	CPIA Transparency, Accountability,

	Institutions Cluster	and Corruption in the Public Sector Rating
2005	3.00	2.81
2006	2.99	2.78
2007	2.99	2.78
2008	2.96	2.75
2009	2.98	2.73
2010	2.98	2.72
2011	3.00	2.78
2012	2.95	2.71
2013	2.94	2.71
2014	2.96	2.74
2015	2.96	2.71
2016	2.97	2.68

Source: World Bank's Country Policy and Institutional Assessment (2017)

Studies by Rodrik *et al.* (2004) revealed that institutions are critical determinants of economic growth. Crucial to public finance, they concluded that the level of institutional development helps explain differences in income (revenue) between countries. Brautigam and Knack (2004) underscored lack of budgetary institutions such as a well-functioning civil service in SSA, and how this has adversely affected the effectiveness of external aid utilisation. A similar observation has been highlighted by Birdsall (2007). Against the backdrop of the foregoing arguments, the effectiveness of budgetary institutions has been recognised in the economic literature as critical contributors to improved fiscal and economic outcomes.

Citing Table 4.3, the World Bank's Country Policy and Institutional Assessment (CPIA) measure of fiscal policy-related institutional indicators reveals a very poor, yet portentous, sign for Africa that is worth examining further. It reveals that generally on a scale of 1 to 6 (where 1 is low and 6 is high), SSA countries have performed below average, below 50% (i.e. less than 3 points) in terms of the ratings on most variables. The dataset for 2005-2016 reveals a poor and yet further depreciating level of transparency, accountability and corruption in the public sector. This is very worrying considering that the public sector is where the budget gets implemented. This has the potential of influencing the authenticity of expenditure items in the budget, and legitimacy of the procurement projects and by extension could contribute to the persistent deficits run by most SSA countries.

4.9 Fiscal transparency trend in SSA

Globally, the last two decades have witnessed a surging interest in fiscal transparency in the fiscal decision-making process (Khagram *et al.*, 2013). This interest may not be unconnected with the frequent fiscal crises that have engulfed most economies (either developed or developing) in recent times and the attendant macroeconomic instability witnessed by many of these economies. This is coupled with the emergence of open government initiatives that have commanded the discourse on governance in the last ten years. By and large, even though several variables have been found to constitute and determine good public finance governance, transparency has been identified by many

recent studies as a key representative of the quality of fiscal institution and also has the capacity to influence fiscal outcome (Alesina and Perotti, 1996 Andreula, 2009; Golwitzer, 2010; Shah, 2007; Tekeng and Sharaf, 2015).The most recent study, Tekeng and Sharaf (2015), narrowed the discourse to fiscal transparency and its determinants in developing countries.

At the core of the current debates around fiscal policy performance in Africa are questions such as to what extent does the quality of fiscal institutions and governance affect fiscal outcomes? Why do budgets fail to achieve their projected outcomes in SSA? How transparent and participatory is the budgeting system? What are the determinants of fiscal transparency in Africa? Are there links between the quality of budgetary institutions and fiscal transparency in Africa?

Numerous definitions have been advanced in an attempt to explain the concept of fiscal transparency. According to IMF (2012: p.1), fiscal transparency is defined as “the clarity, reliability, frequency, timeliness and relevance of public fiscal reporting and openness to the public of the government’s fiscal policy making process”. The most cited definition is that offered by Kopits and Craig (1998: p.1) which considered fiscal transparency as “openness toward the public at large about government structure and functions, fiscal policy intentions, public sector accounts and projections. It involves ready access to reliable, comprehensive, timely, understandable and internationally comparable information on government activities so that the electorate and financial market can accurately access the governments’ financial position and the true cost and benefits of governments’ activities including their present and future social and economic implications.”

Benito and Bastida (2009) summarised this as implying that fiscal transparency is the systematic and timely release of all relevant fiscal information. Amongst the earliest works to highlight the nexus between fiscal rules and fiscal outcome was OECD (2002). It defined transparency as a key component of good governance which has characteristics such as openness around policy intentions of the government, formulation and implementation. The study highlighted the critical role played by the budget given that it is the single most important policy document of government where all policy objectives are reconciled and implemented in concrete terms.

The main elements of a transparent budgetary process include public participation, budget oversight and timely disclosure (transparency) of key budget reports. All these three key elements are important and reinforcing. For instance, the provision of sufficient budget information aids the public to engage in budget discussions in an informed manner. It strengthens public participation by civil society organisations and private citizens. It also aids the quality of the budget process including pre-budget statements, which reveals in good time the macro-fiscal projections of the budget to the public, mid-year budget performance reports, quarterly budget review reports and, most importantly, a citizen’s guide to understanding the budget. These key highlights increase the quantity and quality of information available to the public by providing in-depth details of expenditure and revenue. Also

important is the accuracy, accessibility and timeliness of the release of the quarterly, mid-year and annual reports as well as the reports from oversight visits. The timely release of such reports helps ensure accurate *ex ante* and *ex post* review of budget proposals and implemented budgets respectively. It further helps to achieve budget realism (realistic budget parameter assumptions) and hence to achieve better fiscal outcome.

Currently, the only comprehensive measure of fiscal transparency is that published by the International Budget Partnership (IBP). It is the world's only independent, comparable measure of budget transparency, participation and oversight and is carried out as IBPs Open Budget Survey. Each country is allocated a score ranging from zero (0) to a hundred (100). A country's score depends on the level of detail and timeliness of budget information its governments are making publicly available. The Organisation for Economic Co-operation and Development's (OECD) leading international best practice template on fiscal transparency and budget matters pursued by its member countries led to improved structural deficits and return to economic growth in the 2000s. The relevance of good governance in public finance is crucial given that public expenditure constitutes a significant portion of the size of the economy.

In addition to the highlighted fact, King (2014) suggested that achieving good governance also entails managing risks and performance through robust public financial management, and implementing good practices in transparency, reporting and audit to deliver effective accountability.

4.9.1 How transparent is the fiscal process in Africa?

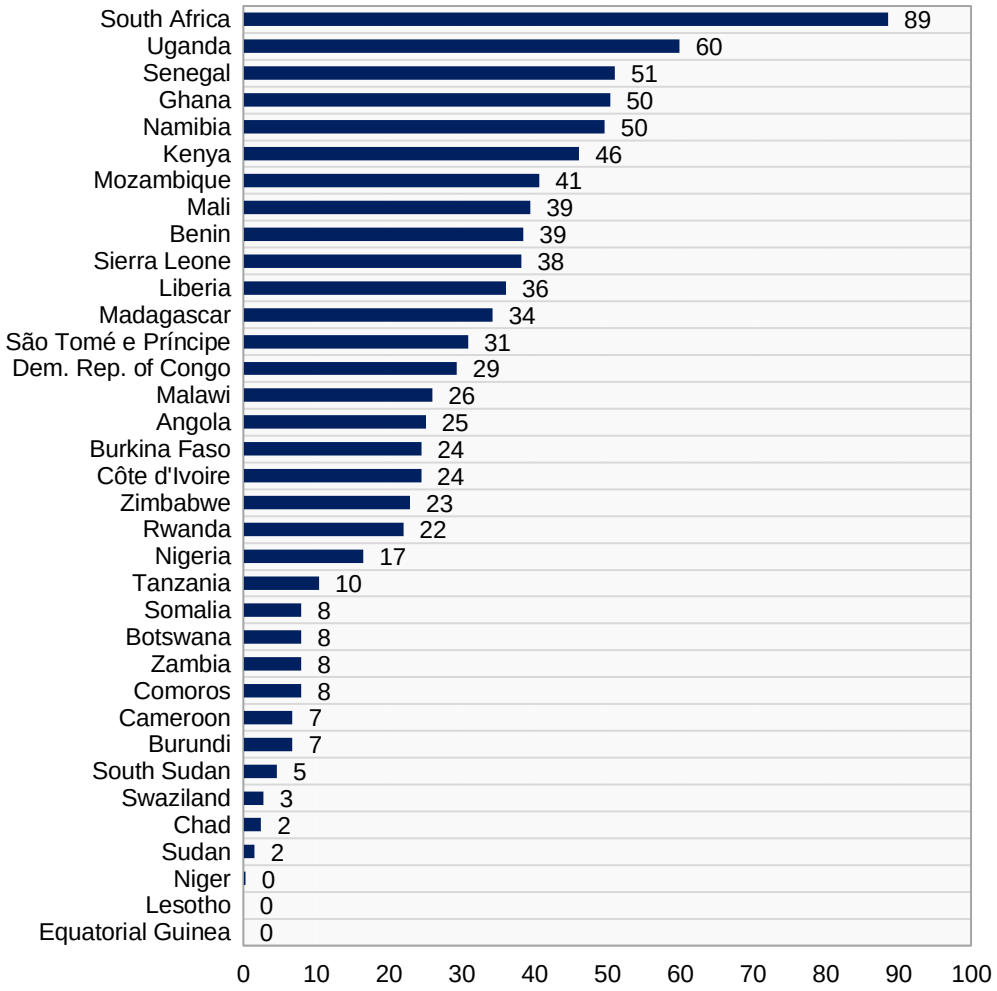
A high level of fiscal opacity (i.e. poor fiscal transparency) in the budgeting process in Africa is shown in Figure 4.5 and Table A.4. With an 89% level of fiscal transparency, only South Africa qualified to be described as having a transparent budget process. Another very important inference from the SSA data is that on average, ***Anglophone*** countries seem to have performed better than most francophone and ***Lusophone*** countries as typified by the presence of only one francophone country, Senegal, among the top five best performing countries in SSA. The abysmal performance of conflict states such as Sudan and South Sudan is not surprising as some of these countries rank high in the list of fragile states. This raises questions such as what are the factors influencing fiscal transparency in Africa? Do administrative heritages such as the legal system impact on the level of fiscal transparency? Such questions will be investigated in the empirical chapters of the study.

There were mixed results from two of the countries with the highest aid as a percentage of national expenditure (Uganda and Tanzania). Uganda ranked second to South Africa on fiscal transparency in SSA with a score of 60%, whilst Tanzania recorded an abysmal 10% on the fiscal transparency index. The performance of Tanzania is contrary to earlier arguments by Mills (2013) on the role of

foreign assistance in improving fiscal transparency, especially when donor agencies attached fiscal transparency as a condition for receipt of donor assistance.

The mixed result of performance by this group of countries warrants a more empirical investigation with a view to establishing causality or not between fiscal transparency and foreign aid. Some of these African countries are heavily factionalised ethno-linguistically and may have experienced civil and ethnic conflicts of late; thus, necessitating questions such as to what extent has ethno-linguistic fractionalisation affected fiscal transparency in SSA. This research question demand empirical investigation.

Figure 4.5: Fiscal transparency in Africa (%) in 2017



Source: Computed by author based on data from International Budget Partnership – Open Budget Index 2017

4.9.2 Improved fiscal transparency in SSA: implications for better fiscal outcome

Several influential studies *e.g.,* Milesi-Feretti (2004), World Bank (1998) and Kilpatrick (2001) have highlighted the importance of fiscal transparency as a necessary accompanying tool to fiscal rules, if better fiscal outcome is the policy objective. Alesina and Perotti (1996) noted that reduction in transparency of the budget process could aid in circumventing numerical fiscal targets via creative

accounting which in the long run would become a hindrance against achieving expenditure control and fiscal consolidation. Lack of transparency will aid in the creation of confusion and opaqueness on the exact level of public finances especially public debt and future obligations. This submission is predicated on the theoretical notion that elected official will generally will prefer such ambiguity.

The first theory in this regard is the fiscal illusion theory by Buchanan and Wagner (1977). According to this theory, uninformed and naïve voters underestimate the cost implications of current and future public programmes, especially when budgets are not transparent. Second, as argued by Rogoff (1990), even with rational voters, strategic ambiguity could create an advantage for policymakers in pursuing their objectives. Moreover, when fiscal rules alone are used and in a rigid form it creates the temptation for countries to embark on the practice of creative accounting – a situation whereby accountants, in this case government accountants and policy makers, can exploit loopholes in the rules to manipulate the figures reported in the accounts (Amat *et al.,*1999). Kilpatrick (2001) went further to highlight the two-fold benefit of transparency in this information age: its ability to, promote a better understanding of policy as well as enhancing fiscal discipline, particularly, when it is in conjunction with adequately defined fiscal rules and mature and respected institutions. This is an approach that has thus far not been fully applied by SSA countries as available data reveals that SSA countries have not achieved a covetous level of fiscal transparency whilst concurrently not achieving their desired fiscal outcome despite the adoption of fiscal rules.

A few empirical studies have buttressed the nexus between fiscal transparency and fiscal discipline further. Von Hagen (1992) revealed that between the 1980s and early 1990s, budget procedures that were more transparent were associated with more fiscal discipline. Interestingly, building upon the earlier study by von Hagen (1992), Hagen and Harden (1995) also arrived at a similar conclusion that countries with more transparent budget procedures achieve more fiscal discipline. An empirical study of 20 Latin American countries by Alesina and Perotti (1997) revealed that greater transparency coupled with considerable powers to the ministries of finance (MoF) over departmental spending are associated with lower budget deficits. The study also revealed that countries with the lowest transparency in the budget process ran public deficits at an average of 1.8% of GDP. However, countries with the highest level of transparency and aggregate control mechanisms ran surpluses averaging 1.7% of GDP.

The World Bank's (1998) new paradigm of getting *the basics right* in public expenditure management also advocates for improvement in fiscal transparency. It argued that when transparency is enhanced, the higher the transparency the lesser the need for a rigid rule. The proposition here is that if fiscal authorities behave in a transparent, credible manner, a fiscal rule can allow for some cyclical variation in spending and some flexibility in the budget planning process (World Bank, 1998; Kilpatrick, 2001). It highlighted further that introducing mechanisms to promote transparency and accountability, which are key elements of the restraint framework, will consequently put a check on

the abuse of flexibility and engender the demand for information. In sum, lack of transparency in the budget process will in the long run become a hindrance to achieving expenditure control and fiscal consolidation.

4.10 Summary, findings and recommendation

As clearly established from the foregoing discourse, SSA economies have experienced poor fiscal outcomes for over a decade. The IMF projections into 2022 also hold ominous worsening fiscal outcomes for African countries. Attempts at addressing such poor fiscal outcomes have seen most SSA economies adopt one form of national fiscal rules or another. Some SSA countries adopted national fiscal rules while others adopted supranational or regional convergence fiscal rules. Nonetheless, as evidenced by IMF data on fiscal policy monitor and World Bank WDI data, despite the adoption of such fiscal rules, African countries have continued to post poor fiscal outcomes over the years. Failure to address this trend may see African countries return to the pre-HIPC years that were characterised by a huge accumulation of unsustainable debt thresholds.

More importantly, our findings reveal that contrary to robust arguments earlier advanced by various economic scholars, SSA countries' fiscal rules were not accompanied by the requisite high levels of fiscal transparency. Most African countries recorded abysmal levels of fiscal transparency. However, from the foregoing argument and empirical studies, it is evident that improvements (higher levels) of fiscal transparency are also needed to accompany fiscal rules in order for such rules to achieve the desired fiscal outcome. This is a situation that is lacking in Africa. On average, the level of fiscal transparency varies across administrative heritage lines with anglophone countries doing somewhat better than the francophone and lusophone countries. In sum, our study identified fiscal outcome challenges, a very weak regulatory framework and fiscal rules that were not accompanied by enhanced levels of fiscal transparency and could not yield better fiscal outcomes in most SSA countries. These speak to the reason why most SSA countries can hardly meet their adopted fiscal targets or the IMF recommended fiscal targets such as deficits as a percentage of GDP and debt rules.

By and large, whereas, fiscal rules may serve as a necessary condition, they are not a sufficient condition when applied without enhanced fiscal transparency if a better fiscal outcome is the anticipated policy objective of a government. Good fiscal outcome can be a balanced budget or deficit which is 3% of GDP or as per the agreed national or supranational benchmark deficit as percentage of GDP. More worrying and portentous is IBP's (2017) report on OBI, which highlighted an 11% drop in SSA's average level of fiscal transparency between 2015 and 2017. This reinforces the need for an empirical investigation that would answer important questions such as what are the determinants of fiscal transparency in Africa? Subsequent chapters will entail empirical examination of the determinants of fiscal transparency in SSA.

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Appendix

Table A.1: SSA general government revenue 2008-2022 (percentage of GDP)

Country	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Angola	50.9	34.6	43.5	48.8	45.9	40.2	35.3	27.3	18.7	17.1	16.6	17.2	17.1	17.1	17.1
Benin	19.8	20.2	18.9	18.8	19.2	18.5	17.2	17.3	15.3	17.9	17.9	18.5	18.9	18.9	19.3
Burkina Faso	16.8	19.5	19.8	20.7	22.4	24.5	21.7	19.4	19.6	22.6	22.7	23.6	24.2	24.8	25.2
Cameroon	21.2	17.4	16.6	17.9	17.9	18	18.1	17.9	16.3	16.6	17.2	17.6	17.7	17.7	17.8
Chad	22.4	14.9	20.2	24.8	24.4	20.7	17.8	14	12.6	16.5	15.8	15.7	15.8	15.5	15.9
Congo DR	11.5	13.7	15.6	13.7	16.5	14.6	18.6	16.8	12	10.6	11.6	11.7	12.2	12.7	13.9
Congo Republic	54.8	30.3	36.7	41.4	42.7	45.1	40.7	30.4	32.3	32.7	32.9	33.3	33	32.6	32.6
Côte d'Ivoire	19.9	18.5	18.1	14.2	19.2	19.7	18.9	20.2	19.8	19.8	20.2	20.6	20.9	21	21
Ethiopia	15.9	16.2	17.2	16.6	15.5	15.8	14.6	15.4	16	15.1	15.1	15.3	15.6	15.9	16.3
Ghana	15.9	16.4	16.7	19.1	18.5	16.7	18.4	19.6	17.3	18.9	18.6	19	19.1	18.9	18.7
Guinea	10.5	11.4	10.8	15.1	17.5	14.8	17	14.9	16.2	17.6	18.1	18.8	19.3	19.4	19.3
Kenya	19.4	18.8	19.8	19.5	19.1	19.7	19.8	19.2	18.8	19	19.5	19.6	19.8	20	19.9
Madagascar	15.9	11.5	13.2	11.7	10.8	10.9	12.4	11.8	14.7	15.1	15.3	15.6	15	15.4	15.7
Mali	17	19.1	17.7	17.1	14.6	17.4	17.1	19.1	18.3	20.6	20	20.4	20.4	20.6	20.8
Mozambique	21.8	24	26.1	27.3	27	31.4	31.8	28.1	26.1	24.7	26.1	26.2	26.2	25.9	25.9
Niger	24.1	18.6	18.2	17.9	21.4	24.6	23	23.5	20.6	21.2	21.3	22.1	23.4	24	24.6
Nigeria	20.1	10.1	12.4	17.7	14.3	11	10.5	7.7	5.3	5.2	5.7	5.9	6.4	6.6	6.8
Rwanda	24.8	23.8	24.6	25.3	23.2	25.5	24.2	24.7	23.7	22.01	21.9	21.7	21.7	21.7	21.7
Senegal	21.8	22	22.1	22.7	23.3	22.6	24.8	25.1	26.8	25.1	25.7	26	26	26.3	24.1
South Africa	28	26.4	26.5	26.9	27	27.3	27.6	28.3	28.9	29.1	24.4	29.6	29.7	29.7	29.7
Sudan	24	16.4	19.7	18.6	9.9	11	12	11	10	9.8	9.2	8.8	8.4	8.1	7.6
Tanzania	16.6	15.7	15.5	15.6	15.7	15.5	14.9	14.5	15.5	16.1	16.3	16.7	16.9	17.1	17.7
Uganda	14.2	13.2	13.2	14.5	13.6	12.7	13.5	14.8	14.9	16.3	16.5	17.2	17	18.4	19
Zambia	18.8	15.7	15.6	17.7	18.7	17.6	18.9	18.8	18.2	17.3	18.4	18.4	18.9	19.4	19.6
Zimbabwe	2.2	11.7	21.8	24.2	24.9	24.6	23.8	24.3	21.7	21.7	21.1	20.9	20.7	20.6	20.6
SSA	19.4	13.9	15.3	18.3	16.7	14.9	14.6	13	12.2	12.6	12.8	12.8	13.1	13.5	13.7

International Monetary Fund. (2017). Tackling inequality. *IMF Fiscal Monitor*, October.

Table A.2: SSA fiscal rules and their enforceability in Africa

S/N	Country	Type of Rule / Supranational Rule and Date	Statutory basis	Coverage	Formal enforcement procedure	Independent body sets budget assumption	Independent body monitors implementation	Well specified escape clauses
1	Cape Verde	Budget Balance Rule (1998)	Statutory	Central Government	No	No	No	No
		Debt Rule (1998)	Political Commitment	Central Government	No	No	No	No
2	Benin	Budget Balance Rule (2000, 2015); Debt Rule (2000,2015); Revenue Rule (2000, 2005)	N/A	N/A	Yes	Yes	Yes (for all three)	N/A
3	Botswana	Expenditure rule (since 2003); BB Rule; Debt Rule 2015	Statutory	Central Government	No	No	No	No
4	Burkina Faso	Budget Balance Rule (2000); Debt Rule (2015); Revenue Rule (2015)	N/A	Central Government	Yes	N/A	Yes (for all three)	N/A
5	Cameroon	Balance Budget Rule (2002, 2008); Debt Rule (2002) (SR)	N/A	Central Government	N/A	N/A	Yes; No for Debt Rule	N/A
6	Central African Republic	Balance Budget Rule (2002, 2008); Debt Rule (2002) (SR)	N/A	Central Government	N/A	N/A	Yes; No for Debt Rule	N/A
7	Chad	Balance Budget Rule (2002, 2008); Debt Rule (2002) (SR)	N/A	Central Government	N/A	N/A	Yes; No for Debt Rule	N/A
8	Congo	Balance Budget Rule (2002, 2008); Debt Rule (2002) (SR)	N/A	Central Government	N/A	N/A	Yes; No for Debt Rule	N/A
9	Côte d'Ivoire	Budget Balance Rule (2000, 2015); Debt Rule (2000,2015); Revenue Rule (2000, 2005)	N/A	Central Government	N/A	N/A	Yes (for all three)	N/A
10	Equatorial Guinea	Balance Budget Rule (2002, 2008); Debt Rule (2002) (SR)	N/A	Central Government	N/A	N/A	Yes; No for Debt Rule	N/A
11	Gabon	Balance Budget Rule (2002, 2008); Debt Rule (2002) (SR)	N/A	Central Government	N/A	N/A	Yes; No for Debt Rule	N/A

S/N	Country	Type of Rule / Supranational Rule and Date	Statutory basis	Coverage	Formal enforcement procedure	Independent body sets budget assumption	Independent body monitors implementation	Well specified escape clauses
12	Guinea Bissau	Budget Balance Rule (2000, 2015); Debt Rule 2000,2015); Revenue Rule (2000, 2005)	N/A	Central Government	N/A	N/A	Yes (for all three)	N/A
13	Kenya	Budget Balance (2013) SR; Debt Rule (Since 2014)	Political Commitment	Central Government	No	No	Yes	No
14	Liberia	Debt Rule (Since 2009)	Statutory	General Government	No	No	No	No
15	Mali	Budget Balance Rule (2000, 2015); Debt Rule (2000,2015); Revenue Rule (2000, 2005)	N/A	N/A	N/A	N/A	Yes (for all three)	N/A
16	Mauritius	Debt Rule (2008)	Statutory	General Government	Yes	No	No	Yes
17	Namibia	Expenditure Rule (2010); Debt rule (2001)	Coalition Agreement	Central Government	No	No	No	No
18	Niger	Budget Balance Rule (2000, 2015); Debt Rule (2000,2015); Revenue Rule (2000, 2005)	N/A	N/A	N/A	N/A	N/A	N/A
19	Nigeria	Budget Balance Rule (2007)	Statutory	Central Government	No	No	No	No
20	Senegal	Budget Balance Rule (2000, 2015); Debt Rule (2000,2015); Revenue Rule (2000, 2005)	N/A	N/A	N/A	N/A	Yes (for all three)	N/A
21	Togo	Budget Balance Rule (2000, 2015); Debt Rule (2000,2015); Revenue Rule (2000, 2005)	N/A	N/A	N/A	N/A	Yes (for all three)	N/A
22	Burundi	Budget Balance (2013) SR; Debt Rule (Since 2014)	Political Commitment	Central Government	No	No	Yes	No
23	Rwanda	Budget Balance (2013) SR; Debt Rule (Since 2014)	Political Commitment	Central Government	No	No	Yes	No
24	South Sudan	Budget Balance (2013) SR; Debt Rule (Since 2014)	Political Commitment	Central Government	No	No	Yes	No
25	Uganda	Budget Balance (2013) SR; Debt Rule (Since 2014)	Political Commitment	Central Government	No	No	Yes	No

Source: Author's compilation from IMF's Fiscal Rules Monitor (2017).

Table A.3: Characteristics and scope of the medium-term budget framework in selected African countries

	Nigeria	Kenya	Namibia	S/Africa	Tanzania	Uganda	Zambia	Advanced Economics*
Date of Establishment of MTBF	2008	2000	2000	1998	2000	1998	2004	1980-2000s
Lead Ministry**	Pre 2015: MoF; Post 2015: MoB&NP	National Treasury & MOP	MoF	NT	MoF & Planning Commission	MoFP	MoFP	Usually MoF
Characteristics and Coverage:								
Coverage***	CG	BCG	BCG	GG	BCG	BCG	BCG	CG or GG
Excluded Transaction-Social Security Debt Interest	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time Frame	3 Years	3 Years	3 Years	3 Years	3 Years	3 Years	3 Years	3 Years
Fixed or Flexible Framework	Rolling	Rolling	Rolling	Rolling	Rolling	Rolling	Rolling	Rolling or Flexible
Ceilings approved by Legislature	Yes	Yes	No	Yes	No	Yes	No	In some cases
External aid included	No	Yes	No	No	Yes	Yes	Yes	Not relevant
Publication of MTEF	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Share of external aid ****	<1%	8%	<1%	<1%	39%	39%	10%	N/A

Source: Author's compilation and IMF's Fiscal Affairs Department (FAD)

Notes of the table:

** MoF= Ministry of Finance; MoB&NP= Ministry of Budget and National Planning; MoP = Ministry of Planning; MoFP= Ministry of Finance and Planning

*** BCG= Budgetary Central Government; CG=Central-Government; GG= General Government

**** As a % of Central Government Expenditure (CGE) as at 2012

Table A.4: Fiscal transparency in Africa (%), 2006-2017

Countries	2006	2008	2010	2012	2015	2017	Average (2006-2017)
Angola	5	4	26	28	26	25	19
Botswana	65	62	51	50	47	8	47
Burkina Faso	11	14	5	23	43	24	20
Cameroon	29	5	2	10	44	7	16
Chad	5	8	0	3	4	2	4
DRC		1	6	18	39	29	19
Equatorial Guinea		0	0	0	4	0	1
Ghana	42	50	54	50	51	50	50
Kenya	48	58	49	49	48	46	50
Liberia		3	40	43	38	36	32
Malawi	42	28	47	52	65	26	43
Mali			35	43	46	39	41
Mozambique			28	47	38	41	39
Namibia	50	46	53	55	46	50	50
Niger		26	3	4	17	0	10
Nigeria	20	19	18	16	24	17	19
Rwanda		1	11	8	36	22	16
Senegal		3	3	10	43	51	22
Sao Tome and Principe		1	0	29	29	31	18
South Africa	86	87	92	90	86	89	88
Sudan		0	8	8	10	2	6
Tanzania	48	36	45	47	46	10	39
Uganda	32	51	55	65	62	60	54
Zambia	37	48	36	4	39	8	29

Source: International Budget Partnership – Open Budget Index 2017

CHAPTER 5
INSTITUTIONS AND FISCAL TRANSPARENCY IN AFRICA[14]

5.1 Introduction

Poor fiscal outcomes characterised by persistent budget deficits, skyrocketing and unsustainable debt threshold with its attendant soaring debt service, is a frequent phenomenon in SSA (Siebrits and Calitz, 2006; Gollwitzer, 2010). The early 2000s saw the emergence of strong arguments for fiscal transparency as a necessary tool needed to accompany fiscal rules if fiscal rules are to yield the desired fiscal outcome. Kilpatrick (2001) is one of the strongest proponents for this argument. Kilpatrick (2001) opined that when combined with fiscal rules and well-developed institutions, transparency could aid in enhancing the understanding of policy as well as the achievement of greater fiscal discipline. Later studies such as Milesi-Ferretti (2004) corroborate this argument.

Fiscal transparency is an important component of political accountability as it enables voters to comprehend government's fiscal plans. Von Hagen (2007) argued that an essential condition of the retrospective voting paradigm[15] is the ability to compare the actual performance of the government against its past plans and intentions. He went further to argue that concentrating on numerical targets for the main budgetary parameters creates natural yardsticks by which voters can measure the actual performance of a government. However, understanding the political bargaining process surrounding the budget and checking whether individual policy makers kept the commitments they entered into during this process is an indispensable condition for holding policy makers accountable in elections (Von Hagen, 2007). Hence, the institutions that shape the budget process environment should be designed in a way that enhances fiscal discipline via the strengthening of the accountability of political agents to their political principals (the voters).

Given the importance of fiscal transparency for improved fiscal outcomes, the abysmal level of fiscal transparency amongst SSA countries thus raises questions such as what then are the institutional determinants of fiscal transparency in SSA? One of the earliest studies to x-ray the nexus between fiscal transparency and fiscal rules at a supranational level is Milesi-Ferretti (2004). With emphasis, on how the Maastricht Treaty influences fiscal outcome in EU member states, the study concluded that fiscal transparency does influence fiscal performance, given that in a transparent fiscal

[14] This paper has been presented at the 2019 Africa Meeting of the Econometric Society's Conference organised by the Econometric Society and the Bank Al Maghreb and held in Rabat, Morocco from 10th-13th July 2019.
[15] The retrospective voting paradigm refers to the process of voting only upon taking into consideration factors such as the performance of a political party, an officeholder or/and an administration. It is more concerned with previous policy outcomes than policy instruments.

atmosphere, fiscal transparency will compel elected officials to carry out measures that are vital to balancing the budget.

This chapter focuses on examining the underlying institutional determinants of fiscal transparency in SSA. It is a key component of the institutional, political and economic categories of factors that extant literature on the determinants of fiscal transparency globally considers. In other words, our study presents an empirical investigation with a view to establishing the nexus between institutional factors and fiscal transparency in SSA. The rest of this chapter is structured as follows. Section 5.2 presents a background on fiscal transparency, as well as some stylised facts on the quality of institutions and fiscal transparency in Africa. Section 5.3 reviews relevant literature and theoretical underpinning. Section 5.4 presents the methodology comprising model specifications and estimation technique. Section 5.5 presents the empirical results and discussions. Finally, Section 5.6 concludes with some policy recommendations.

5.2 Background and stylised facts on institution and governance in SSA

5.2.1 Background of the study

The last two decades have witnessed a surging global interest amongst scholars and policy makers on fiscal transparency, accountability, good governance and participation in the fiscal decision-making process (Khagram *et al.*, 2013). This surging interest in fiscal transparency is predicated on the failure of fiscal rules to address the persistent fiscal deficits and debts in most developing countries including SSA.

Although various definitions of fiscal transparency have been advanced by scholars and policy makers, one of the most comprehensive definitions is that offered by Kopits and Craig (1998, p. 1), which defined fiscal transparency as “openness toward the public at large about government structure and functions, fiscal policy intentions, public sector accounts, and projections. It involves ready access to reliable, comprehensive, timely, understandable, and internationally comparable information on government activities so that the electorate and financial markets can accurately assess the government’s financial position and the true costs and benefits of government activities, including their present and future economic and social implications.” Benito and Bastida (2009) summed it up as the systematic and timely release of all relevant fiscal information.

Fiscal transparency has also been defined as “the clarity, reliability, frequency, timeliness, and relevance of public fiscal reporting and the openness to the public of the government’s fiscal policy-making process — a critical element of effective fiscal management” (IMF, 2012, p. 4). Institutions have been defined as humanly devised constraints (formal and informal) that structure political, economic and social interaction (North, 1990). They consist of sanctions, taboos, customs, norms, traditions and codes of conduct. Thus, in essence, they can be described as the rules of the game

(formal and informal) which affect economic incentives and behaviour. Institutions and governance are inextricably linked. Though quite eclectic and ubiquitous, the term governance has been referred to as all of the processes of governing, whether undertaken by a government, market or network, whether over a family, tribe, formal or informal body or territory, and whether through the laws, norms, power or language of an organised society (Bevir, 2013).

Despite the global attention that fiscal transparency has drawn in the last decade and a half, not very many empirical studies have been carried out on its (fiscal transparency's) determinants. Of the few empirical studies, no known study thus far has focused exclusively on SSA. This is worrying considering that African countries form the bulk of the countries that have experienced poor fiscal performance in the last three decades. This is reinforced by other factors such as frequent reports of budget-related corruption scandals, some of which can be attributed to the opacity surrounding the budget process in Africa. Most of the studies on fiscal transparency have focused on benefits of fiscal transparency rather than its drivers. Prior studies have found that fiscal transparency is associated with improved fiscal discipline (Alesina and Perotti, 1996), and better credit ratings (Hameed 2005). Djankov *et al*. (2004) took the argument further by emphasising that a more transparent government permits the economy to incur lower social costs as the government undertakes the task of controlling economic disorder. The IMF (2007a) maintained that budget transparency helps in shedding light on potential risks to the fiscal outlook. It argued that such insights could yield timely and smoother fiscal policy responses to fluctuating economic conditions, thus mitigating the incidence as well as the severity of crises.

Employing a set of 27 former socialist countries, Jarmuzek *et al.* (2006) examined the role of fiscal transparency in creating better fiscal discipline. The study found a negative, albeit weak, relationship between fiscal transparency and debt accumulation. Alt and Lassen (2006) revealed that fiscal transparency reduces public debt and deficits, even after controlling for political variables such as legal heritage and political competition. Fiscal transparency also helps in ensuring that fiscal risks are recognised and addressed promptly. However, one of the lessons from the 2008-2012 global financial crises is need for *timely and accurate* understanding of national governments' fiscal position (debts and deficit levels) as well as the prevention of all forms of creative accounting.

5.2.2 Some stylised facts on institutions and governance in SSA

The concepts of good governance and institutions are inextricably linked. The notion of good governance has assumed an eclectic dimension. It entails a process whereby public institutions conduct public affairs, manage public resources**,** and guarantee the realisation of human rights. It has been defined in quite a number of ways. The World Bank (2007. p. 1) defined governance as "the manner in which public officials and institutions acquire and exercise the authority to shape

public policy and provide public goods and services". According to Kaufmann *et al.* (2010), governance consists of the traditions and institutions by which authority in a country is exercised.

Table 5.1: Institutional measures of governance

S/N	Clusters	Sub-category
1	Selection, accountability & replacement of authorities	-Voice and accountability -Political stability & lack of violence
2	Efficiency of institutions, regulations, resource management	-Regulatory framework -Government effectiveness
3	Respect for institutions, laws & interactions among players in civil society, business & politics	-Control of corruption -Rule of law

Source: World Governance Indicators (2016)

A more recent definition in the African Finance Governance Outlook published by the African Development Bank (AfDB) in (2018) defined governance as a process referring to the manner in which power is exercised in the management of the affairs of a nation, and its relations with other nations. The key elements of good governance were identified as ensuring participation, accountability and transparency, combating corruption and promoting an enabling legal and judicial framework. In addition to the management of the affairs of a nation and promotion of an enabling legal framework, more importantly, this definition highlights the need for transparency and accountability. Despite the numerous definitions of what good governance should entail, Kaufman *et al*. (2007) and Kaufman and Kraay (2007)) highlighted that on the whole, many of these definitions aptly underscore the significance of a capable state that is accountable to its citizens and functions under the rule of law. The World Bank's compendium of institutional governance indicators, WGI (2016) encapsulates these qualities of a capable state that is accountable to its citizens under the rule of law, essentially qualifying them to be collectively described as good governance.

Abysmal governance provides greater motivation and increases opportunities for ethical misconduct. Governance is the processes and institutions over which decisions in a country are reached and authority is exercised. It rests on the twin values of inclusiveness and accountability (IMF, 1997). In measuring institutional governance, the World Bank's Governance Indicators have aptly decomposed governance into three main clusters and six sub-indices as summarised in Table 5.1. These measures have formed the key measure of institutional quality for over two decades. Institutions form the incentive structure of a society, and consequently, the political and economic institutions are the underlying determinants of economic performance (North, 1990). Acemoglu *et al*. (2003) argued that institutions matter for growth outcome.

The trend of the different institutional governance indicators in Africa for the period 1996-2017 is represented in Figure 5.1. The World Bank's Institutional Governance Indicators (WGI) estimates of

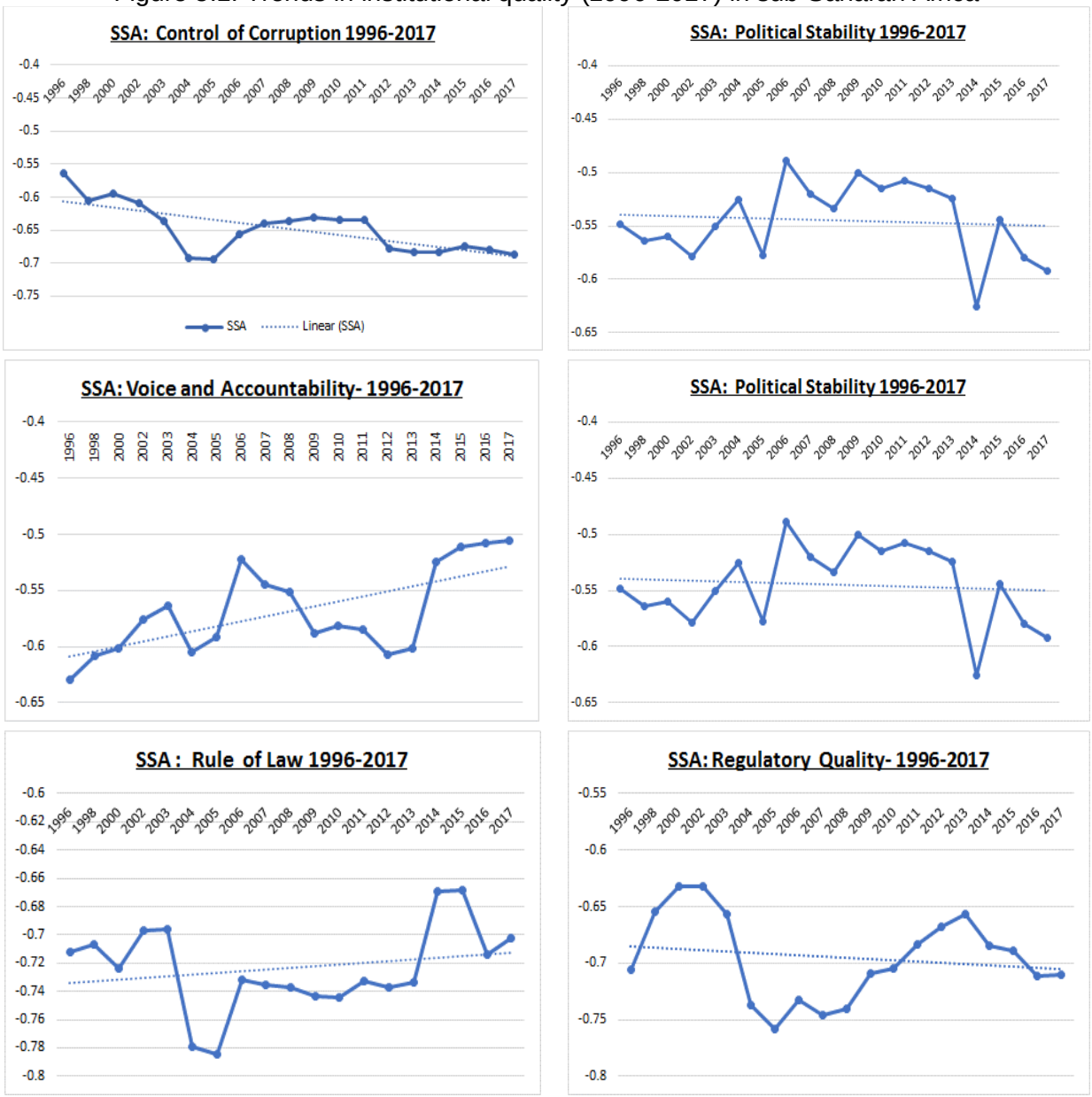
governance range from -2.5 (weak) to 2.5 (strong) institutional governance performances. Generally, in all the six institutional governance indicators, SSA countries have revealed very weak institutional performance for the period considered, as they are all negative. It can be inferred that generally, barring 2004-2006, the control of corruption in Africa has only worsened. As aptly highlighted by the IMF (1997), corruption undermines the public's trust in its government and thus could be detrimental to economic activity and could affect budget outcome. It also threatens market integrity, distorts competition, and endangers economic development. From the late 1990s the IMF has been increasingly interested in governance issues, such as promoting public sector transparency and accountability. Heald (2013) argues that information flows can be expected to be compromised by attempts to cover the trail of corruption. Hence, part of the efforts to improve information flow (transparency) is to address corruption challenges.

Abysmal governance provides greater motivation and increases opportunities for ethical misconduct or corruption (i.e. the abuse of public office for private gain). However, within the framework of public accountability and governance, we shall limit the notion of governance to the efficient and effective use of public resources in a transparent and corrupt-free framework that is protected by stability of the political system and the rule of law. These characteristics are encapsulated by the six WGI (see Table 5.1). Referring to Figure 5.1, it could be argued that although specific institutional governance indicators in SSA have evolved differently over time, the indicators for corruption, government effectiveness, and political stability have deteriorated since 1996 while measures of regulatory quality, rule of law, and voice and accountability improved. A Study by Rodrik *et al*. (2004) revealed that institutions are critical determinants of economic growth. Their study also concluded that the level of institutional development helps to explain differences in income (revenue) between countries.

Brautigam and Knack (2004) point to the lack of institutions of governance such as a well-functioning civil service in SSA, and how this has adversely affected the effectiveness of external aid utilisation. A similar observation has been highlighted by Birdsall (2007), who pointed out that weak institutions avert the most effective use of external aid, which is a key source of financing the budget in some SSA countries. Figure 5.1 further shows that generally, baring slight ebbs in 2005 and in 2015, African countries experienced a modest improvement in political stability. This is understandable as most conflicts in SSA are being resolved. There has been an upward trend in voice and accountability, suggesting there is increasing space for civil societies and civil liberties such as media freedom, freedom of association, freedom of expression and the ability of citizens to elect their government. However, whether or not these voice and accountability agencies are asking the right questions that can yield a better level of transparency in the fiscal policy space can only be established via an empirical analysis of the association between fiscal transparency and voice and accountability. The entrenchment of democracy in Africa has made some inroads as more

governments in Africa are elected, albeit there still exist pockets of political instability and violence, most of them post-election related.

Figure 5.1: Trends in institutional quality (1996-2017) in sub-Saharan Africa



Source: World Governance Indicators (2017)

Government effectiveness, a reflection of government's ability to offer good quality public services, and formulate and implement policies that are indicators of government effectiveness, has been on a steady and gradual decline for our research period 1996-2017. The rule of law in Africa generally deteriorated between 2003 and 2013, although with some swings. It improved slightly between 2014 and 2015 and deteriorated again in 2016. Regulatory quality in SSA has not defined a clear path of evolution during the period 1996–2017. It improved marginally between 1998 and 2003 and then it declined up till 2011, only to achieve some recovery between 2012 and 2014. By the end of 2014, however, it had commenced a deterioration which continued into 2017. In general, institutional

governance indicators in Africa have not witnessed significant improvement over the period under consideration.

The emerging key principles underpinning modern budgeting are institution-centred, and include comprehensiveness and discipline, honesty, information, contestability, legitimacy, flexibility, predictability and, most importantly, transparency and accountability (World Bank, 1998). Essentially, institutional weaknesses have mostly been identified as one of the main causes of poor growth in developing countries (Prakash and Cabezon, 2008). Predictably, most African countries rank abysmally low in most institutional governance rankings.

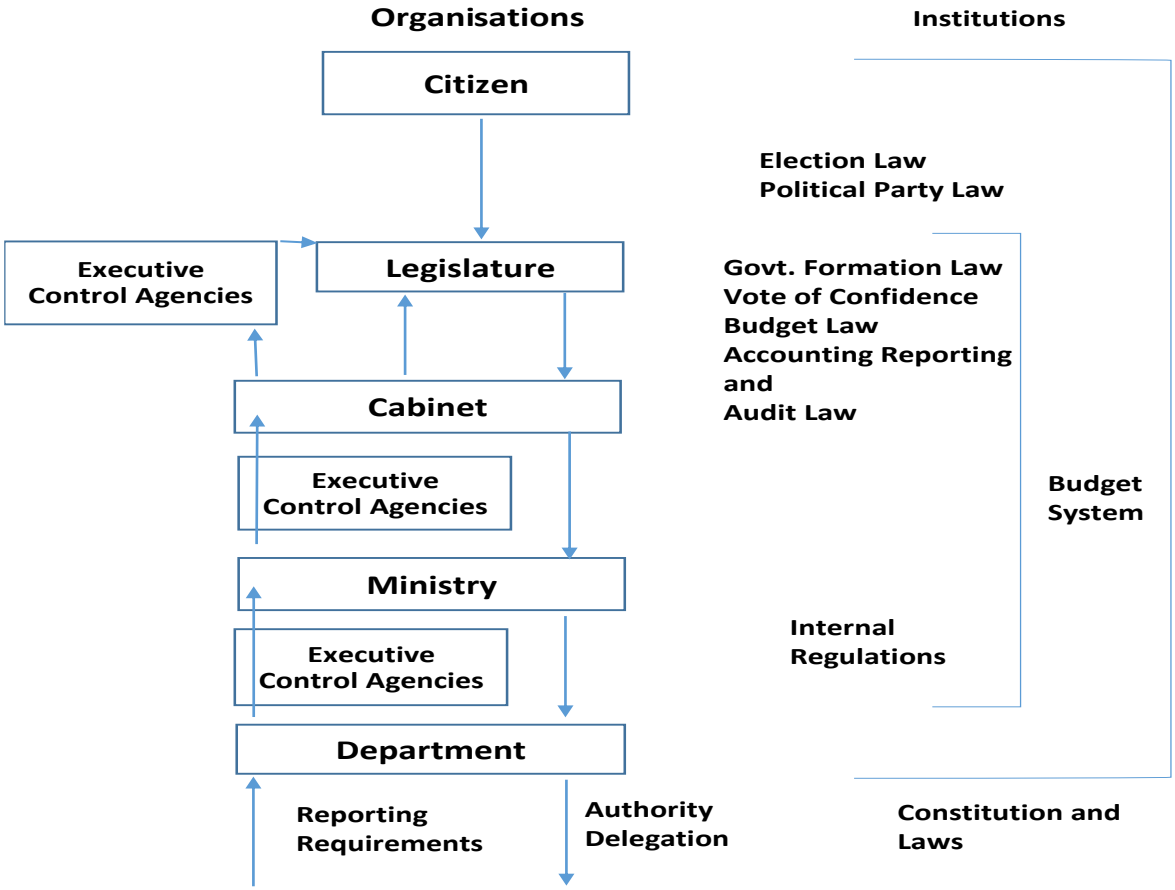
5.3 Conceptual framework, theoretical underpinning and literature review

5.3.1 Conceptual framework: institutional budget arrangements and fiscal transparency

Within the ambits of the budget system of democratic countries, the budget process mimics a Principal-Agency relationship. The reporting requirements (whom to report to) and the authority delegation of the budget process with the citizens as the ultimate delegator are represented in Figure 5.3. A key objective of enhanced fiscal transparency is to improve on public accountability. Consequently, an enhanced public accountability process is expected amongst other things to ensure efficient public expenditure management which could in turn reduce the extent of deficits and debts. Some of the early studies that lay the foundation for an institution-oriented approach to budget reforms for developing countries are World Bank (1998) and Schick (1997 and 1998). The World Bank (1998) built on Schick's (1997) proposition on 'getting the basics right' in terms of budget reforms for developing countries. The World Bank (1998) suggested that when considering budgetary reforms, countries should build institutional mechanisms that support and demand a performance orientation for all dimensions, arguing that such countries should also create mechanisms to promote transparency and accountability. Nonetheless, both transparency and accountability to a large extent depend on the quality and timeliness of the reporting on fiscal information. This in turn emanates from the quality of institutions guiding the entire budget system and the whole gamut of relevant players ranging from the president, ministers, the legislature, the community, central agencies, line agencies, and individual managers or front-line providers (World Bank, 1998). Such discipline connotes North's (1990) definition of institutions.

Two significant deductions can be drawn from the forgoing positions put forward by Shick (1997) and World Bank (1998). First, organisations are not institutions: without effective institutional drivers such as effective laws and regulations, government effectiveness, rule of law etc. guiding the budget process, the budget system will not be effective and fiscal policy performance could be compromised. The second highlights the importance of transparency and accountability in an efficient budget process.

Figure 5.3: Conceptual framework: institutional budget arrangements as a principal agency relationship



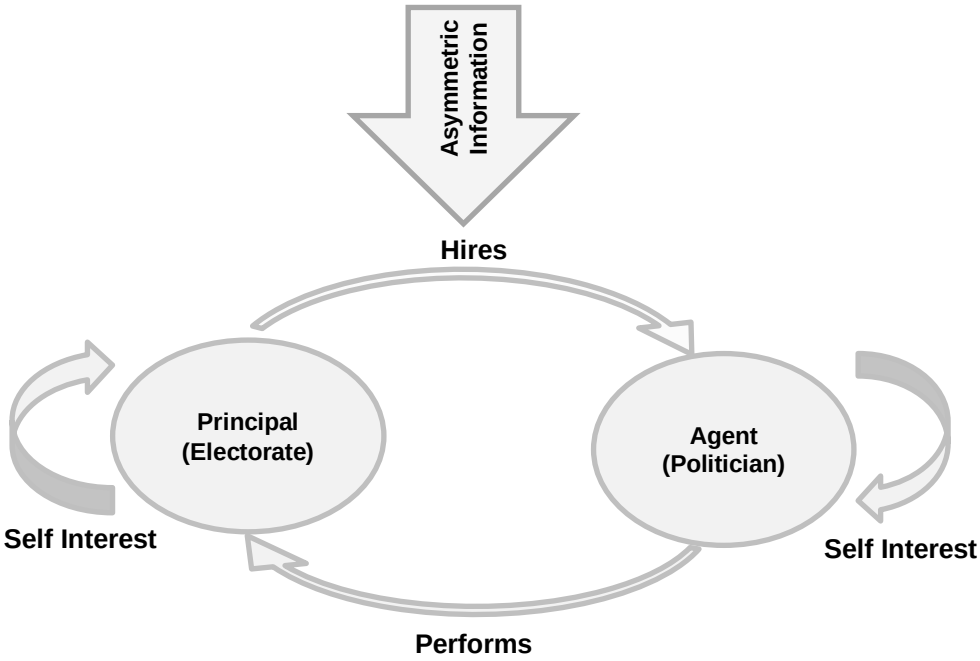
Source: Adapted from World Bank (1998) Public Expenditure Manual

5.3.2 Theoretical underpinning – Principal Agency theory

The two most renowned theoretical constructs that best explain the political and institutional determinants of fiscal transparency are the *principal-agency* and *common pool* theories. As represented in Figure 5.4, a key suspicion on why policy makers or politicians (agents) prefer an opaque fiscal process is fear of the backlash from their principals (the electorate) who hire them via elections and fire them when poor fiscal outcomes are recorded or at the first sign of unexplained secrecy on how government finances are being managed.

As reported by De Simone *et al.* (2017), the majority of the existing studies on fiscal transparency are largely based on the principal-agency theory which models the relationship between citizens (principals) and politicians (agents). According to this model, such a relationship is characterised by imperfect and asymmetric information that permits fiscal policy misconduct by self-interested agents. Against the backdrop of the principal-agency framework, the mandatory release of fiscal information that is introduced by fiscal transparency measures will reduce information asymmetry, consequently facilitating the monitoring by principals (the electorate). This will facilitate the emergence of a government that will be more accountable and responsive to the electorate.

Figure 5.4: Principal agency theory, fiscal transparency and accountability



Following the exposition, fiscal transparency becomes an important requirement for rewarding (voting in) or sanctioning (voting out) agents based on whether or not they have been transparent. As clearly highlighted by Lindstedt and Laurin (2010), fiscal transparency becomes the indispensable driver of the process of demanding accountability from fiscal policy decisions by politicians and hence the effectiveness of citizens' delegating power. Heald (2013) also buttressed this point by stressing that transparency is essentially about governance – information flows can be expected to be compromised by attempts to cover the trail of corruption. Thus, fiscal transparency and accountability are anchored on the dynamics and varying interest between the policy makers (politicians), the quality of the governing institutions and the stakeholders in the budgeting process

The conduct of fiscal policy mimics a principal-agent relationship, where the electorates (principal delegates the responsibility of managing the budget process to the politicians (agents). An earlier work that identified this relationship is Von Hagen (2007). However, it identified two key problems with this delegation arrangement. First, is the tendency for elected officials (the agents) to receive rents as public office holders but spend public funds on projects other than those considered necessary by the electorates. Secondly, is the common pool problem in which the elected governing authorities spends on public policies from the general tax fund (common pool), albeit to the benefit of individual groups (a particular constituency) rather than policies that could be beneficial to the society as a whole. This is mostly at the behest of the representative for such a constituency. Thus, the net benefits for the targeted groups usually exceed the net benefits for society as a whole. Such situations yield excessive levels of public spending and huge deficits and debts (von Hagen and Harden, 1995; Velasco, 2000; Milesi-Ferretti, 2004).

As earlier mentioned, but not expatiated, this delegation of authority to elected politicians leaves room for the prospect of politicians extracting rents from being in office and spending public moneys on projects other than those that the electorate desire. This is owing to the substantial residual powers which politicians have. Such residual powers emanate from the quantity and quality of information on the true state of government finances, how they are being managed and the significant discretionary expenditure powers that are privy only to elected officials (agents) and not to the electorate. Evidently, the greater these residual powers, the more the divergence between voter preferences and actual policies will be. On the other hand, the electorate will want to curtail these privileges by subjecting politicians to stringent and detailed rules that meticulously describe what they can and cannot do and under what definite circumstances. Thus, as aptly described by Persson *et al*. (1997) and Seabright (1996), the principal-agent relationship in the context of the budget process resembles an incomplete contract. Khagram *et al*. (2013) itemised four key causal triggers whose complex interaction in combination advances or impede fiscal transparency: political transitions, fiscal and economic crises, political and corruption scandals, and external influences.

Specifically, the last two to three decades witnessed a massive wave of transition into a multiparty democratisation process, a period which Huntington (1991) referred as the third wave of democratisation. Prior to this period, most African countries were previously characterised as closed, authoritarian regimes. Characteristically, such closed states were marked by low transparency thresholds given the paucity of institutions for checks and balances in such systems. Khagram *et al*. (2013) described multiparty democratic administrations as characterised by separation of power, policy contestations, party competition, organised civil society organisations, engaged citizenry and an active media. These are key ingredients for a transparent society. They argued that these triggers create opportunities and shape incentives for key players — political leaders, civil servants, and civil society actors — to take action in designing, implementing, and sustaining reforms designed to promote fiscal openness. Fiscal and economic crises can also trigger calls for higher levels of fiscal transparency. Studies such as Caprio (1998) support this position. Caprio's (1998) study on the causes of the Asian financial crises revealed that the hardest hit Asian countries during the financial crises were the least transparent Asian countries. Vishwanath and Kaufmann (1999) also argued that paucity of transparency, and consequently the lack of public transparency, can serve as a constraint on economic policy and social outcomes impacting negatively on welfare and development.

The role of political corruption scandals in the quest for greater fiscal transparency in the management of government finances cannot be overemphasised, particularly in the context of some SSA countries. Recently, a flurry of allegations of corruption by incumbents and the promise of a more transparent and accountable government by opposition parties, seems to have had some effect in electoral losses by incumbent presidents to the opposition. Itodo and O'Regan (2018) stated the

role played by political and corruption scandals in triggering fiscal transparency accountability, especially in Africa's most populous country, Nigeria. They stressed that there is an invigorated push for transparency and accountability in Nigeria owing to an increased level of activism coupled with a desire to collectively and robustly confront corruption. External influence as a trigger on fiscal transparency has mostly emanated from international donor countries and agencies in the form of insistence as a policy, and on tying improvements to the existing levels of fiscal transparency as a precondition for future donor support (Drummond, 2011).

5.3.3 Review of related literature

The literature on fiscal transparency and institutions has gained traction amongst scholars and policy makers for quite some time. Whereas fiscal transparency has been identified as a vital element needed for sound fiscal policy management and thus a requirement for robust public sector governance, the dearth of literature on its determinants, especially in the context of SSA, is still a source of concern. This is especially so given the region's poor fiscal performance for over two decades. As highlighted earlier, whilst much has been written on the benefits of fiscal transparency, there are still very few studies on the determinants of fiscal transparency. The theoretical literature on the causes and consequences of fiscal, or budgetary, transparency is small (Alt and Lassen, 2003). Of these few prior studies, more have focused on the political and economic determinants with fewer studies focusing on the institutional determinants.

Using the basic OLS, Gollwitzer (2010) found that strong budget institutions help to enhance fiscal balance and lower public external debt. One of the earliest empirical studies to examine the determinants of fiscal transparency was Alt *et al*. (2006), which employed data from the various states in the US to empirically examine the determinants of fiscal transparency. Categorising their explanatory variables into two sets, political settings and fiscal environment, they found that political dynamics as well as past fiscal outcomes affect the level of transparency. The study also revealed that there is a propensity for political competition to lead to an increase in the level of fiscal transparency. However, it is important to point out that the over-simplistic definition of partisan fragmentation in the US context as employed by Alt *et al*. (2006), where a two-party system prevails, may assume a stronger dynamic in multi-party societies such as in SSA.

While studies like Kilpatrick (2001) and Milesi-Feretti (2004) highlighted that fiscal transparency is needed as an accompanying tool to fiscal rules in order to achieve better fiscal outcomes, a study by Alt and Lassen (2006) based on 19 OECD countries revealed that there is a propensity for political competition to lead to an increase in the level of fiscal transparency. A cross-sectional study by Andreula *et al*. (2009) was the first empirical study to specifically examine the role of institutions in influencing fiscal transparency. Their study was based on 82 (developed and developing) countries using the basic OLS and the Two Stage Instrumental Variables (IV2SLS) methods, and revealed

that better institutional quality gave rise to better levels of fiscal transparency. Studies by Andreula and Chong (2016) arrived at a similar conclusion and revealed positive association between the six WGIs and fiscal transparency. The crucial role played by institutions such the media, civil societies and the legislature in promoting fiscal transparency and accountability cannot be overemphasised (Blöndal, 2003) as cited in (Benito and Bastida, 2009).

Studies by Ellis and Fender (2006) revealed that the presence of corruption and fiscal transparency can be related, implicitly or explicitly related to each other and vice versa. Studies by Glennerster and Shin (2008) revealed a negative relationship between fiscal transparency and corruption. Reinikka and Svensson (2004) found that fiscal transparency reduces creative accounting. Heald (2013) suggested that information flows (transparency) can be expected to be compromised by attempts to cover the trail of corruption. Employing the OLS and the IV2SLS both Andreula *et al*. (2009) and Andreula and Chong (2016) found a positive association between control of corruption and all the sub-indices of fiscal transparency. Focusing on the nexus between mineral wealth and fiscal transparency and based on a sample of 83 (developed and developing) countries, a study by Ross (2011) identified the nature of the relationship between natural resource wealth and fiscal transparency. The study revealed that the nexus is contingent on the prevailing political system. Amongst democratic countries, a country's mineral wealth is found not to be related to the transparency of its government. However, this is not the case amongst autocracies where greater mineral wealth was found to be correlated with less fiscal transparency. Interestingly, the study also found non-fuel mineral wealth unexpectedly associated with greater transparency.

Employing the IV2SLS, a study by Tekeng and Sharaf (2015) focused exclusively on 26 developing countries: only seven SSA countries that have the data needed to fit into their designed fiscal transparency index were included[16]. They introduced factors such as natural resources wealth, the quality of institutions (proxied by regulatory quality) and the level of literacy in an economy into the discourse on the determinants of fiscal transparency. They found that the level of natural resources influenced fiscal transparency negatively. They also found that the quality of institutions (proxied only by regulatory quality), as well as literacy rates positively affects fiscal transparency. In addition to their index, they employed the IBP's OBI and Andreula *et al*.'s (2009) index. Their findings imply that good levels of fiscal transparency are associated with countries with where literacy rates are high , *ceteris paribus*. This further implies that higher literacy rates could lead to more informed communities, civil societies and groups, and pressure groups that demand access to information and participation in the fiscal policy decision-making process.

[16] The seven SSA countries included in the sample of developing countries are Kenya, Gabon, Namibia, Ghana, Equatorial Guinea, Mozambique and Cameroon.

Wehner and De Renzio (2013) examined the nexus between natural resource dependency and fiscal transparency. A unit increase (equivalent to about nine log units) in *per capita* oil and gas revenues was found to lead to a 17-point decrease in a country's OBI scores. Employing cross-sectional studies, Wehner and De Renzio focused on global datasets of 85 developed and developing countries. They expanded the scope of the study by including new variables that could explain the fiscal transparency changes. The findings from the study revealed that civil law regimes were associated with lower levels of fiscal transparency by more than ten points, albeit the result is statistically insignificant. This finding is similar to earlier arguments advanced by La Porta *et al*. (1999) that an interventionist legal or administrative heritage impacts negatively on economic performance. Similar findings were arrived at by Alt and Lassen (2006). Employing the opposite legal system (i.e. common law), Alt and Lassen's study of 19 OECD countries revealed that the practice of common law is associated with higher levels of fiscal transparency. This implies that administrative heritage seems to influence budget transparency.

5.4 Methodology

5.4.1 Estimation of the underlying drivers of fiscal transparency

In this section, we outline the procedure for estimating the econometric model of the underlying institutional forces driving changes in fiscal transparency in SSA for the period (2006-2015). We also present the data employed, their measurements and sources.

Panel data econometric analysis comes with an advantage of augmenting the variability of the data and enables us to gain more degrees of freedom and hence more sample variability than cross-sectional data analysis (Hsiao 2007). Also, as noted by Wooldridge (2010), whilst cross-sectional regression estimates might be biased owing to risk from omitted-variable bias, employing panel data allows for the control of unobserved time constant variables. Moreover, panel data analysis includes a time variation (within-country standard deviation), as well as country variation (between-country standard deviation). As such, our hypothesis that there is a positive association between the quality of institutional governance indicators and the level of fiscal transparency in SSA countries is tested with the following panel data model.

$$FT_{it} = \beta' x_{it} + \varepsilon_{it} \; i = 1, \dots\dots N; \dots\dots\dots, T \tag{5.1}$$

Where FT_{it} represents fiscal transparency for country i at time t; x_{it} represents a set of time varying as well as time invariant covariates; β denotes the associated vectors of parameters we intend to estimate. Our composite error term ε_{it} is given as $\varepsilon_{it} = \omega_i + \epsilon_{it}$, where ω_i represents the unobserved country specific effect and ϵ_{it}, is the idiosyncratic error term. Our covariates variable includes the institutional governance quality index (IGQI) constructed by the author from six institutional governance indicators: voice and accountability, political stability and absence of

violence, government effectiveness, rule of law, regulatory quality, and control of corruption. These indicators are drawn from Kaufman *et al.* (2010) and published by the World Bank's (2016) Governance Indicators.

We built the IGQI using the Principal Component Analysis (PCA) with a view to obtaining aggregate measures of institutional quality index in Africa, and hence measuring the overall impact of the quality of institutions on fiscal transparency. The PCA technique aims at describing a variable with a set of variables with a lower dimensionality. Statistically, the PCA can be defined as an orthogonal linear transformation that transforms the data into to a new coordinate system such that the greatest variance by any projection of the data lays on the first coordinate, called the first principal component (Andreula and Chong, 2016). Hence, this method will permit us to arrive at the best linear combination of the variables.

Our empirical models investigate the relationship between IGQI and fiscal transparency. We consider the nexus between each of the different components of our institutional governance index and fiscal transparency. Following the extant studies, IGQI has been shown to be one of the key variables that positively influence fiscal transparency (see e.g. Andreula *et al*., 2009; Andreula and Chong, 2016). These two studies found positive relationships between the individual institutional indices and fiscal transparency. Regulatory quality has been found to have a positive impact on fiscal transparency (Tekeng and Sharaf, 2015). The control variables considered include administrative heritage (Civil law), military expenditure, revenue derived from natural resources; business disclosure (Business), and economic growth and population growth rate (Popngrowth).

Some of these socioeconomic factors may affect fiscal transparency positively or negatively. For instance, natural resource wealth has consistently revealed a negative relationship with fiscal transparency (see e.g. Wehner and De Renzio, 2013; Tekeng and Sharaf, 2015). This may be attributed to the *rentier state nature* of such economies and their attendant vulnerabilities to factors such as corruption which De Simone (2017) showed to be negatively correlated to fiscal transparency. The poor level of transparency in the extraction of such natural resources may also be a contributing factor. Private disclosure and government disclosure go hand-in-hand with overall government transparency. Tekeng and Sharaf (2015) argued that compelling private firms to a high standard of transparency, particularly when engaging in government contracts, could broadly aid in improving transparency.

The extent of militarisation of a country relative to the total labour force is also expected to be negatively associated with fiscal transparency (Tekeng and Sharaf, 2015). Similar to Tekeng and Sharaf, to capture and measure the power that the political regimes or administrations wield to the detriment of freedom of expression, we included a variable for military personnel. This is measured as the ratio military personnel in a country (including paramilitary forces), to the total labour force of

the country derived from the World Development Indicators (World Bank, 2016). Civil law, which is rooted in the French legal system, was chosen as our preferred dummy variable measure of administrative heritage. La Porta *et al*. (1999) argued that societies based on civil law are usually interventionist and mostly record poor economic performance. Hence, we hypothesise that civil law is associated with lower levels of fiscal transparency.

Population growth is expected to have a positive relationship with fiscal transparency. As nations experience population increase, the pressure of judicious and transparent use of resources is expected to be higher. Economic growth is expected to have an ambivalent relationship with fiscal transparency. If the growth is inclusive, it will lead to an improvement in well-being; the citizenry will become more knowledgeable about their rights and will be able to seek more transparency in use of public funds. The opposite will be the case if growth is not inclusive.

A concern with the econometric model (Equation 5.1) stems from the assumption that fiscal transparency responds to changes in the covariates instantly. In reality, it is probable for the covariates to affect fiscal transparency with some lags. In addition, the past level of fiscal transparency could potentially influence the subsequent fiscal transparency level. As suggested by De Renzio (2011), current levels of fiscal transparency influence future transparency levels given that part of the major preconditions by donor countries for future aid is an improvement by recipient countries on their current levels of budget transparency. The current level of fiscal transparency usually leads to calls by civil society organisations (CSOs) for future improvements, especially in the light of SSA's poor fiscal transparency performance. Thus, we consider a dynamic model as it provides for partial adjustments as follows:

$$FT_{it} = \beta_{ft} FT_{i\,t-1} + \beta' x_{it} + \varepsilon_{it} \tag{5.2}$$

Where $FT_{i\,t-1}$ is the lagged dependent variable; and β_{ft} is the measure of the adjustment process, which is expected not to be greater than one (1). All our variables are as previously defined above.

Equations 5.1 and 5.2 denote the static and dynamic fiscal transparency models respectively. However, the static panel model may be disposed to challenges such as endogeneity and unobserved heterogeneity as well as cross-sectional dependence issues challenges. Whilst the unobserved heterogeneity effect can be addressed using the fixed effect (FE) estimator by treating the unobserved effects as time invariant, the random effect (RE) estimator is employed[17] whenever statistical evidence suggests that the unobserved heterogeneity is a random variable and is not correlated with the covariates (x_{it}). Endogeneity problems could emanate from the institutional

[17] The choice between FE and RE estimators is determined by carrying out the Hausman test with a null hypothesis (H_0): unobserved heterogeneity (ω_i) is not correlated with the covariates (x_{it}). Under the null hypothesis (H_0), the RE is consistent and efficient. Regardless of whether or not H_0 is true, the FE estimator is always consistent, the random effect is best if H_0 is true as in the Best Linear Unbiased Estimator (BLUE).

variables as well as from omission of other relevant variables from the model. Nonetheless, the unobserved time invariant heterogeneity issues as well as the endogeneity issues can be addressed using the Instrumental Variables (IV) estimator that is based on FE. However, results from both FE and IV could also be biased due to the presence of cross-sectional relations. SSA countries may be made up of sovereign states, there still exists the possibility of equal response from the countries to commons shock. This suggests that some of the institutional or socio-economic factors considered in the model and ultimately fiscal transparency may be correlated.

The dynamic panel model (Equation 5.2) is also disposed to some econometric challenges such as those underscored above. This is further made difficult by challenges posed by correlation between the lagged dependent variable and the error term, specifically with regard to the unobserved country-specific heterogeneity ω_i. In addition to these challenges, given that FT_{it} is also a function of ω_i, which is time invariant, the inclusion of $FT_{i\,t-1}$ as one of the regressors in Equation 5.2 may correlate with ω_i and hence with ε_{it}. Also, the presence of the lagged dependent variables $FT_{i\,t-1}$ as one of the regressors in the model could lead to autocorrelation challenges in the model. As aptly argued by Roodman (2009), given such situations, employing the OLS technique will yield biased and inconsistent estimates and it will be better to adopt the generalised method of moments (GMM) technique over the FE and IV estimators. Furthermore, as highlighted by Bond (2002), panel data estimator permits the consideration of the dynamic process and is very important for recovering consistent estimates of the parameters of interest.

In this regard, to avoid results that are potentially biased, we adopt the Arellano and Bond (1991) GMM estimator as it controls for the unobserved country heterogeneity (country-fixed effect) and endogeneity (bi-directionality) of the explanatory variables as well as the lagged dependent variable, to estimate our dynamic model. For instance, while some empirical studies (e.g. Andreula *et al*., 2009) revealed a positive impact of government effectiveness measures on fiscal transparency, Montes *et al*. (2018) identified a reversed causal relationship. Specific to our case, the dynamic panel GMM approach will permit us to treat fiscal transparency as a dynamic process as well as addressing such issues of bi-directionality. However, there are two types of GMM estimators: the difference GMM estimator and the systems GMM (SGMM) estimator. Our estimations of the empirical relationship between fiscal transparency and institutional variables as well as other control variables of interest will be estimated using the SGMM estimator because it has proven more efficient. With the SGMM, additional instruments are easily obtained from the system of two equations (a differenced and a level equation). The addition of the second equation yields more instruments and, more importantly, the SGMM is suitable and particularly relevant for our study as it is designed for situations with short time periods and many countries (Roodman, 2006). This clearly fits our dataset with a short time period of five years, and a larger number of SSA countries (23 countries).

Two types of systems GMM estimator exist: the one-step estimation and the two-step estimation. In this study we employed the two-step estimator which has the Windmeijer (2005) corrected standard errors because this is asymptotically more efficient than the one-step estimator. The orthogonal deviations were used because we have a panel with gaps. This is with a view towards maximising the sample size. Lastly, to check for consistency of our estimates, we use two specification tests: the Hansen test of over-identification restrictions and the Arellano and Bond test for second-order serial correlation in the error term. The Hansen test measures the validity of the instruments by analysing sample analogues of the moment conditions used in the estimation. By design, the error term may be serially correlated in the first order. Nevertheless, second order serial correlation will be a sign of misspecification (i.e. AR (2) must not be significant).

Our core variables of interest, the institutional variables, have values that range from -2.5 (weak) to +2.5 (strong). Response variables that can be both positive and negative are often characterised by skewness which often necessitates logarithmic transformation. However, most log transformations focus on the normal log transformation, in situations where the variable concerned is strictly positive or is zero. Given that our institutional variables contain both negative and positive values, we employed the special case transformation known as the negative log transformation, which helps us to deal with the log of negative numbers based on the work by Whittaker *et al*. (2005). Particularly, it reduces skewness and produces a nearly linear or additive relationship. The negative log transformation overcomes the difficulty of taking the log of negative numbers as well as that of zero. The negative log transformation applies the following rules when taking the log of a variable:

$$ln(x) = \begin{cases} -\ln(x+1), x \leq 0 \\ \ln(x+1), x > 0 \end{cases} \tag{5.3}$$

Equation 5.3 can also be written as

$$sign(x)\ln(|x|+1) = \begin{cases} 1, x > 0 \\ -1, x < 0 \end{cases} \tag{5.4}$$

This function passes through the origin, behaves like x for small x, positive and negative, and like $sign(x)ln(abs(x))$ for large |x|. The gradient is steepest at 1 at x = 0, thus, the transformation pulls in extreme values relative to those near the origin. It has recently been dubbed the *neglog transformation* (Whittaker *et al*., 2005). An earlier reference for this approach was given by John and Draper (1980).

Lastly, the panel unit root test was not conducted in this study. This is owing to the small sample nature of the study – an unbalanced panel of 3-5 years for just 23 countries. Hurlin and Mignon (2007) strongly argued that indeed, it is well known that unit root tests generally have low power in small sample sizes to distinguish non-stationary series from stationary series that are persistent. Hurlin and Mignon argued that to enhancing the power of unit root tests, will entail increasing the

number of observations by including information relating to various individuals or countries. Against the backdrop of our scope of study, which is on sub-Saharan Africa, with a defined number of observations, and due to data limitations, it is not practical for us to increase either the number of countries or the time dimension of our study. Also, as an important rule with the system GMM technique, we ensured that the number of instruments was never more than the number of groups.

5.4.2 Data sources

Our data set is an unbalanced panel of 23 SSA countries over the period 2006-2015. Our length of time series dimension is largely determined by the availability of data for different SSA countries. It is pertinent to point out that, although our dependent variable data, the Open Budget Index (OBI) is available up to 2017, the corresponding data for most of the other variables of interest were not available up to 2017. Thus, the scope of our empirical analysis is limited to 2006–2015. See Table 5.2 for full details of data, sources and definitions.

As rightly identified by De Simone (2009) and Tekeng and Sharaf (2015), one of the most important challenges of the literature on fiscal transparency remains its measurement. Varied existing measures of fiscal transparency exist, however, most of them are fraught with challenges ranging from geographical localisation to lack of homogeneity in the data collection process for the various indices. For instance, the OECD Best Practices for Budget Transparency data provides data only for OECD states. Guerrero and Hofbauer (2001) propose an index of budget transparency for five Latin American countries: Argentina, Brazil, Chile, Mexico, and Peru. Some measures are also drawn from non-numerical reports such as the IMF's Report on the Observance of Standards and Codes (ROSCs).

The ROSCs employs dummy variables to measure simple adherence to fiscal transparency principles. Hameed (2005), Jarmuzek *et al*. (2006) and Andreula *et al*. (2009) employed the use of (ROSCs) after which they allocated numerical values to the performance of the countries selected according to specific aspects of the report. In their study on determinants of fiscal transparency in developing countries, Tekeng and Sharaf (2015) employed different measures of fiscal transparency but only seven African countries could be captured in the list of twenty-seven developing countries covered by the study. To overcome the measurement challenges highlighted, our study will employ data from the International Budget Partnerships' Open Budget Index (OBI), (2006-2015) derived from the international budget partnerships, as our measure of fiscal transparency.

Table 5.2: Variables, sources and definition

Variable	Definition	Source
ft	Fiscal Transparency measured in percentage (%)	International Budget Partnerships, Open Budget Survey (2006-2015)
Gastilpolcivil	Political and civil liberties	International Budget Partnerships, Open Budget Survey (2006-2015)
Military	No. of military personal as a (%) of total labour force	World Bank's World Development Indicators (WDI) 2016
GDPPC	GDP *per capita* in current US$	World Bank's World Development Indicators (WDI) 2016
Latitude	Distance from the equator	
Natres	Natural resource revenue as a (%) of GDP	"
Business	Measure of the extent to which private actors are protected via disclosure of their ownership and financial information.	"
Growth	Growth rate of GDP at market prices (in %)	"
Popngrowth	Growth rate of the number of people in a given country	"
Urbpopn	Number of people in the urban area of a given country	"
Voice	Perceptions of the extent a country's citizens are able to participate in selecting their government, freedom of expression and association, and a free media.	"
Pol	Political stability and absence of violence measuring perceptions of the likelihood of political instability and/or politically-motivated violence, with terrorism.	"
Regq	Regulatory quality which reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.	"
Geff	Government effectiveness reflecting observations of the quality of public services, quality of the civil service, degree of its independence from political pressure, quality of policy formulation and implementation, and credibility of the government's commitment to such policies.	"
Corpt	Control of Corruption: reveals perceptions of the extent to which public power is exercised for private gain, including petty and grand forms of corruption and capture of the state by private interests.	"
ROL	Rule of law: reveals perceptions of the extent to which agents have confidence in and abide by the rules of society and the quality of contract enforcement, property rights, the police, and the courts.	"
Ethno-fractionalisation	The average of available data for ethnic & linguistic fractionalisation	Alesina *et al*. (2003).
Civillaw	=1 if legal origin of country is France, 0 otherwise	Author's computation
IGQI	Index measuring the combined quality of institutions derived using the Principal Component Analysis (PCA) from the Six World Governance Indicators	Authors computation based on PCA

Source: Computed by the authors

The OBI is the world's only independent comparative measure of national governments' budget transparency. It assigns countries covered by the Open Budget Survey a transparency score on a 100-point scale. It uses a subset of questions that assess the quantity and timeliness of budget information that central governments make publicly available in eight key budget document areas during the budget cycle and in accordance with international good practice standards. The OBI is not published annually, hence our datasets are for 2006, 2008, 2010, 2012 and 2015. It is pertinent to point out that we built an index of aggregate institutional governance measure. This is to enable us to measure the combined effect of all our institutional governance indices on fiscal transparency. Other main sources of data are World Bank's World Development Indicators (WDI), World Bank's World Governance Indicators (WGI) and Polity IV database.

5.5 Empirical results and discussions

5.5.1 Summary statistics and correlation matrix

This section presents and discusses the empirical results from the model estimation. We start with the presentation of the descriptive statistics to provide us with a simple description of the data employed for the analysis. This is followed by a presentation of the correlation matrix and subsequently by a formal presentation of the empirical results that test our stated hypothesis. Table 5.3 presents the descriptive statistics.

The average level of fiscal transparency for Africa is 32.33% for the period 2006-2015. This is quite abysmal, and corresponds to a low level of fiscal transparency characterisation on the open budget index scale (0-100%). When considered individually, on average, all the measures of the different elements of institutional quality (i.e. political stability, voice and accountability, rule of law, government effectiveness and regulatory quality) posted very weak results as they all posted negative outcomes on a scale of -2.5 (for weak) to 2.5 (for strong). This finding corroborates the earlier findings from the stylised facts in section 5.2.2 on institutions and points to institutional vulnerabilities in SSA. We also looked at the trend of our control variables including natural resources as a percentage of GDP, military expenditure as a percentage of GDP, administrative heritage proxied by the legal system practiced (civil or common law), population growth, business environment, and economic and population growth.

On average, natural resources as a percentage of GDP are over 15% in SSA. This is not surprising as most African countries depend on revenues from sale of natural resources. This can breed institutional vulnerabilities such as a *rentier* system that is mostly characterised by corruption and fraud. The average growth rate for SSA is 5.73% whilst Africa's population grew at an average of 2.83% for the period covered in our analysis.

Table 5.3: Summary statistics of variables

Variable	Observation	Mean	Standard Deviation	Minimum	Maximum
ft	104	32.33	23.53	0.00	92.00
Civillaw	104	0.44	0.50	0.00	1.00
Ethno-fractionalisation	104	0.72	0.17	0.22	0.92
Latitude	104	0.13	0.09	0.00	0.29
Military	97	0.55	0.57	0.08	2.71
Natres	104	15.44	12.93	1.37	58.04
Business	100	5.02	1.93	0.00	8.00
GDPPC	104	2,494.13	4,030.03	182.00	28,103.00
Growth	104	5.73	3.98	-9.09	18.99
Popngrowth	104	2.83	0.71	1.05	4.61
Urbpopn	85	5.54	6.58	0.89	28.30
Gastilpolc~l	103	4.08	1.60	1.50	7.00
Voice	104	-0.38	0.61	-1.48	0.65
Pol	104	-0.51	0.92	-2.67	1.20
Regq	104	-0.49	0.54	-1.59	0.68
Geff	104	-0.64	0.61	-1.80	0.83
Corpt	104	-0.61	0.63	-1.61	1.06
Rol	104	-0.63	0.58	-1.76	0.66
(IGQI)	104	-4.30e-09	1.00	-1.94	2.23

Source: Computed by authors

However, on a cautionary note, whether or not Africa's growth rate has been inclusive and has led to a general improvement in well-being and thus affords its citizens the knowledge with which to seek greater transparency is another area that can be examined. The average GDP *per capita* is US$2,494.13 with a minimum value of US$182 *per capita*. This accounts for why most SSA countries are characterised as low income to lower-middle income economies under the World Bank's classification.[18]

The pairwise correlation matrix for the variables that we employed in our empirical analysis is presented in Table 5.4. Generally, correlation results serve as a pointer of causal relationships although they do not establish causation. In terms of signs and magnitude, upon inspection it can be seen that most of our institutional indices have the expected relatively high positive correlation with fiscal transparency. We anticipate that an improvement in the quality of institutions will lead to an improvement in fiscal transparency. Other control variables such natural resource revenue, military (number of military personal as a percentage of total labour force) and the practice of civil law have the expected negative correlation with fiscal transparency. This is not surprising as most natural resource rich African countries have recorded poor levels of fiscal transparency (OBI, 2006-2015). This is coupled with the rentier nature of such countries coupled with the poor transparency that accompanies the reporting of proceeds from mineral sales. The negative correlation between military and fiscal transparency is expected given that such levels of military force in developing countries often characterises repressive and less transparent regimes.

[18] See World Bank's country and lending groups classification from https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.

Table 5.4: Correlation matrix of variables

Variable	Ft	Voice	Polstab	Regq	Geff	Corpt	Rol	Civillaw	Military	Natres	Business	Growth	Popngrowth
ft	1.000												
Voice	0.707	1.000											
Pols	0.379	0.534	1.000										
Regq	0.676	0.721	0.604	1.000									
Geff	0.687	0.754	0.643	0.932	1.000								
Corpt	0.527	0.692	0.679	0.839	0.893	1.000							
Rol	0.652	0.811	0.747	0.881	0.922	0.906	1.000						
Civillaw	-0.597	-0.623	-0.150	-0.355	-0.413	-0.322	-0.422	1.000					
Military	-0.091	0.037	0.054	-0.025	0.085	0.113	0.057	0.117	1.000				
Natres	-0.406	-0.516	-0.276	-0.612	-0.599	-0.465	-0.577	0.286	-0.045	1.000			
Business	0.169	0.214	0.364	0.439	0.392	0.436	0.378	0.314	-0.195	-0.114	1.000		
Growth	-0.164	-0.145	0.029	0.002	0.024	0.052	-0.048	0.057	0.035	0.234	-0.105	1.000	
Popngrowth	-0.587	-0.627	-0.280	-0.642	-0.715	-0.647	-0.596	0.493	-0.374	0.512	-0.226	0.131	1.000
IGQI	0.652	0.812	0.747	0.881	0.922	0.906	1.000	-0.422	0.057	-0.577	0.378*	-0.048	-0.596

Source: Author's computation

Upon inspection of our correlation matrix, it can be seen that the six dimensions of institutions in Africa hold a high pairwise correlation amongst each other. This trend is not surprising as most SSA countries' institutional qualities fell under the negative spectrum (lower performance) on the scale of -2.5 to +2.5. As highlighted earlier, this necessitated our employment of the PCA to build our aggregate institutional quality index (IGQI). However, it is pertinent to point out that the high correlation amongst the six dimensions of institutions in Africa gives no cause for general concern of multicollinearity. This is owing to the fact that in our chosen methodology, they will not be used in the same model. The remaining covariates do not hold high correlation values

5.5.2 Findings of the underlying drivers of fiscal transparency

This sub-section presents and discusses the empirical results from the panel-data country regression summarised in Table 5.5. As highlighted earlier in the methodology section (5.4.1), owing to the limitations of the static panel data model and its estimators and the fixed effect and instrumental variables technique, the analysis and reports for our study are predicated on the dynamic panel data models estimated with a system GMM estimator.

There are seven dynamic regression models in the results table. The first six present the regression estimates of the institutional governance indicators, namely voice and accountability (lvoice), political stability and absence of violence (lpolstab), regulatory quality (lregq), government effectiveness (lgeff), control of corruption (lcoc), and rule of law (lrol). The seventh regression is governance quality (lIGQI). Referring to their definitions in Table 5.2, the higher the institutional value, the better the institutional indicator. The expected or predicted signs of βs for the institutional variables are intuitively expected to be positive and statistically significant. Sometimes institutional factors can be somewhat correlated, as in this case. Employing the seven main variables of interest individually in each of the seven models permits us to capture the near-exact impact (size) of each variable on fiscal transparency, hence avoiding the possibility of overlapping impact.

From Table 5.5, the lag of the dependent variable Ft(-1) is statistically significant and positively associated with contemporaneous levels of fiscal transparency in Africa. More importantly, the absolute value of this autoregressive parameter is less than unity. This is a necessary condition for a dynamic panel data model to be considered stationary (Blundell and Bond, 1998; Ashley and Sun, 2016). Our measure of the overall quality of institutions in Africa (IGQI) exhibits a positive association with fiscal transparency in Africa albeit not significant at the conventional 5%.[19] This implies that a simultaneous improvement in the six) different dimensions of institutions would lead to an improvement in fiscal transparency in African countries.

[19] The probability that IGQI positively leads to improvement in fiscal transparency in Africa is just at the 50% level.

Table 5.5: Empirical results from dynamic model estimations

Dependent variable: Fiscal Transparency							
Explanatory Variables	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)
Ft (-1)	0.668***	0.617***	0.581***	0.754***	0.570***	0.609***	0.562***
	(0.083)	(0.043)	(0.069)	(0.074)	(0.073)	(0.044)	(0.150)
lVoice	-1.521						
	(1.709)						
lPolstab		-1.642***					
		(0.316)					
lRegq			-2.092***				
			(0.499)				
lGeff				3.726***			
				(0.646)			
lCorpt					-1.350***		
					(0.303)		
lRol						2.827**	
						(1.143)	
lIGQI							1.530
							(2.309)
Civillaw	-11.213**	-6.522*	-15.264***	-7.610*	-9.689***	-5.866	-15.656**
	(4.194)	(3.410)	(3.879)	(4.046)	(3.397)	(3.464)	(6.825)
Military	-1.107	-6.868***	-5.963**	5.326	-8.872***	-5.692**	-1.733
	(2.988)	(1.921)	(2.251)	(3.221)	(1.771)	(2.210)	(6.389)
Nat.Res	0.115	-0.048	-0.032	0.146	-0.032	0.003	0.510***
	(0.106)	(0.096)	(0.120)	(0.095)	(0.090)	(0.102)	(0.162)
Business	4.778**	1.338	4.845**	5.901***	2.808*	1.053	5.376**
	(1.770)	(1.213)	(1.855)	(1.617)	(1.368)	(1.206)	(1.943)
Growth	-0.468*	-0.417	-0.437*	-0.524**	-0.518**	-0.645**	-0.599*
	(0.248)	(0.277)	(0.215)	(0.235)	(0.202)	(0.241)	(0.347)
Popngrowth	-4.284*	-7.606***	-1.294	-4.641	-8.027***	-8.556**	-11.356*
	(2.466)	(2.409)	(3.265)	(2.706)	(2.168)	(3.262)	(2.146)
Constant	9.364	40.178***	11.500	-5.072	39.837***	42.895***	25.908
	(15.129)	(10.239)	(16.499)	(16.563)	(11.711)	(11.534)	(24.613)
Diagnostics:							
No. of Obs.	78	78	78	77	78	78	78
No. of Groups	23	23	23	23	23	23	23
No. of Instrument	23	23	23	23	23	23	16
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-test	194.0***	828.9***	653.5***	163.0***	1061.0***	2517.0***	17.91***
AR (1): (p-value)	0.220	0.833	0.267	0.247	0.333	0.367	0.236
AR (2): (p-value)	0.783	0.322	0.651	0.672	0.653	0.667	0.852
Hansen: (p-value)	0.507	0.341	0.203	0.750	0.420	0.548	0.447

Notes: (a) *** p<0.01, ** p<0.05, * p<0.1 (99%, 95% and 90% significance levels respectively)
(b) Standard errors in parentheses,
(c) Variables in small letters are in log form and variables in capital letters are in levels. All estimations are undertaken in STATA 14.

A similar positive association between the aggregate measure of institutional quality and fiscal transparency was established by Andreula *et al*. (2009) and Andreula and Chong (2016) and the result from their study was significant at the conventional 5%. Employing the IV2LS and data from 82 developing countries, both studies concluded that there was a strong positive relationship between aggregate institutional variable and fiscal transparency. It will suffice to highlight that IBP (2010) reinforces this position in part by positing that some of the institutional governance indicators such as Control of Corruption and Voice and Accountability are in part implicit measures of a government's commitment to budget transparency. In other words, they are contributing factors to fiscal transparency levels. Nonetheless, unlike Andreula *et al*. (2009) and Andreula and Chong (2016) studies which were cross section analyses on over 82 countries (developed and developing), we employed a dynamic panel model estimated by system GMM for our analysis covering only SSA.

As discussed earlier, this frees our results from the biasness associated with the OLS and 2SLS. It also frees our analysis from the limitations of cross-sectional analysis. Our analysis also overcomes the bias associated with studies based on a heterogeneous collection of countries (developed and developing). We proceeded to investigate, individually, the relationship between our six institutional governance indicators and fiscal transparency. In line with our hypothesised expectations, two of our institutional governance measures, namely government effectiveness (geff) and rule of law (rol), were highly statistically significant and revealed a positive association with fiscal transparency in Africa. This is similar to findings by Andreula *et al*. (2009) and Andreula and Chong (2016).

This result may be attributed to the incremental enhancement in the quality of the public service in Africa. Several international and local capacity building strides have been made in recent years. Public financial management innovations by international bodies such as the World Bank's Integrated Financial Management Information System (IFMIS) have been successfully domesticated by the Ministries of Finance (MoF) in many African countries. The rule of law's positive relationship with fiscal transparency may be attributed to the transition from totalitarian and mostly military rule to democratic rule by most African states. Khagram *et al*. (2013) identified political transition as one of the triggers of fiscal transparency. This has resulted in the relative improvement in the independence of the judiciary in most SSA countries. One of the key institutional indices that has drawn much attention due to its deleterious impact generally on the economy, fiscal performance and fiscal transparency, is corruption. In our analysis, employing control of corruption (CoC) we examined the nexus between control of corruption and fiscal transparency. We hypothesise a positive relationship between control of corruption and fiscal transparency. It is important to point out that corruption affects the budget process in several ways.

As with most developing countries, public financial corruption in SSA countries is manifest and affects the budget in the areas of public procurement, direct taxation and customs (Schiavo-Campo, 2007). In some African countries, procurement laws are either obsolete and/or inefficient, thus

making it easy for side-stepping of such rules via an understanding between contactors and public officials. The other two corruption-centred public finance problems highlighted by Schiavo-Campo (2007) include, firstly, masking of corruption by good fiscal marksmanship on the revenue side of domestic taxation. This entails the forecasting of fiscal revenue to close to the previous year's revenue and relative to actual tax revenue collected. This tax revenue figures may not be close to the potential tax revenue that can be collected on the basis of the profile and number of tax payers. Secondly, falsification of certificates of origin so as to deliberately misclassify imported items into a lower tariff category is another public finance corruption technique.

Contrary to *a priori* expectations, our results reveal a negative but highly statistically significant association between control of corruption and fiscal transparency. Our finding is contrary to earlier findings by Andreula *et al*. (2009) and Andreula and Chong (2016). Their study revealed a strong positive relationship between control of corruption and fiscal transparency. Khagram *et al*. (2013) amongst other factors identified reports of political corruption scandals as one of the triggers of fiscal transparency. Studies by Mauro (1995), Hall and Jones (1998) and Rodrik (1998) also highlighted deleterious effects of corruptions and rent seeking on economic development (an offshoot of economic growth). As aptly pointed out by Baldrich (2005), avoiding corruption is at the core of a transparent fiscal framework. Glennerster and Shin (2008) found a negative relationship between fiscal transparency and corruption. Ellis and Fender (2006) found corruption was associated implicitly or explicitly with fiscal transparency and vice versa.

A plausible explanation of why improvements in control of corruption and fiscal transparency are having the contrary relationship could be as a result of creative accounting and sharp practices that permit the exploitation of loopholes in the legal and public finance framework of the country. Reinikka and Svensson (2004) found a negative relationship between fiscal transparency and creative accounting. From a public finance viewpoint, creative accounting entails exploitation of the loopholes in the legal and public finance framework of the country. This is especially so when there are no sanctions for such actions. The IBP's Open Budget Survey (2006, 2008, 2010, 2012, 2015 & 2017) has consistently revealed that most African countries either do not produce the requisite budget review documents or, when they do, they are rarely made public on time. This deprives the electorate of the needed timely data with which to engage the politicians. Thus, any efforts in controlling corruption need to include sanctions for hindering full and timely disclosure (transparency) in the budget process. More so, it is very important to highlight that our finding may also be attributed to the fact that the outcome of control of corruption may be somewhat difficult to observe, except the government of the day makes it explicitly obvious by revealing the outcome decision on every corruption case, especially high-level corruption cases from its government. Thus, it is very possible that any perceived increase in corruption control may not be seen as adequate to justify effective transformation in fiscal transparency.

Our empirical analysis reveals that, contrary to *a priori* expectations, voice and accountability is negatively associated with fiscal transparency in SSA albeit not statistically significant. Andreula and Chong (2015) employed OLS on a cross section of countries (developed and developing) and found a positive and significant relationship between voice and accountability and fiscal transparency. Voice and accountability reflect the extent to which a country's citizens are perceived to be able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. Accountability connotes the capacity to call public officials to task for their actions (Schiavo-Campo, 2007). This is not so much the case in SSA. In many parts of Africa, the electoral process is mostly characterised by suppression of voters and lack of credibility. Press freedom is not guaranteed as obtains in climes with stronger institutions. This is corroborated by the fact that most African countries score very low in terms of media participation in the budget process.

The Open Budget Survey (OBS) 2018 Report on 2017 open budget survey buttresses this point, stating that African countries have the worst decline in budget with transparency, with a drop of about 11% between 2015 and 2017.[20] This is compounded by limited space for CSOs. The report argued further that the "declines in budget transparency are worrisome against a global backdrop of rising inequality, restrictions on media and civic freedom, and a weakening of trust between citizens and their governments" (OBS 2017: p 4). To date, some African states are yet to have a freedom of information (FOI) Act, and where they do, most times they have not been institutionalised thus making it difficult to timeously elicit most fiscal information from government agencies. Blöndal (2003) as cited in Benito and Bastida (2009) highlighted the importance of robust legislations that provide for efficient monitoring of the budget process coupled with efficient civil society and media groups in order to be able influence budget policy as well as demand for effective public accountability.

Our finding then begs new questions which can only be answered by a field study, such as: Are CSOs asking the right budget governance related questions of SSA governments, especially in terms of how to enhance the level of fiscal transparency in SSA? Are these questions being channelled to the appropriate government agencies responsible for reforming the fiscal disclosure process of governments? Finally, contrary to *a priori* expectations, political stability and regulatory requirements showed significantly negative in their relationship with fiscal transparency in Africa. These findings are also different from the two prior studies of Andreula *et al*. (2009) and Andreula and Chong (2016) that examined the same phenomenon.

Following the existing literature, we controlled for some socio-economic cum political economy dynamics. Some of the control variables we used have been used in prior literature on determinants

[20] See 2017 OBI Report Press Release. https://www.internationalbudget.org/wp-content/uploads/open-budget-survey-2017-press-release-english.pdf.

of fiscal transparency including military force as a percentage of total labour force, natural resources revenue as a percentage of GDP, business disclosure index, administrative heritage proxied by legal system operated by the various African countries (civil law dummy), GDP growth, and population growth (Tekeng and Sharaf, 2015; Wehner and De Renzio, 2013). For administrative heritage, we employed dummy variables. We also experimented with the literacy level, but paucity of data on the literacy rate in most SSA countries hindered us from including it in the model.

The type of legal system employed in the different SSA countries was used as our measure of administrative heritage. In our empirical analysis, we elected to use civil law which is the basis of the French legal system as our chosen indicator variable (measure of administrative heritage). The dummy variable technique was employed in our empirical analysis where (1) stood for countries that practice civil law and (0) for countries that do not practice civil law. Whereas civil law, which is rooted in the French legal system, was chosen as our preferred dummy variable measure of administrative heritage, La Porta *et al*. (1999) revealed that, in interventionist legal cultures where civil law is applied, it usually yields inferior government performance on a range of indicators, including corruption, compared to those predicated on the British common law tradition. Hence, we expect a negative relationship between civil law regimes and fiscal transparency in SSA.

Generally, as argued by Wehner and De Renzio (2013), there is a nexus between the overall administrative machinery of a country and the design of its budget systems including its level of transparency. In consonance with our hypothesised expectations, and similar to earlier findings by Wehner and De Renzio (2013), our study revealed a negative association between civil law administrations (our indicator for administrative and legal heritage) in Africa and fiscal transparency for all our models. Similarly, employing common law (the opposite of civil law), Alt and Lassen (2006) found a positive relationship between common law and fiscal transparency. However, unlike Wehner and De Renzio (2013) our results were statistically significant.

These findings are similar to earlier findings by Alt and Lassen (2006) and corroborate the arguments by La Porta *et al*. (1999) on the nexus between legal heritage and government efficiency. Using a set of 19 OECD countries and a system method, Alt and Lassen (2006) revealed that common law (the opposite of civil law) legal origin is positively correlated with their measure of fiscal transparency. As stated earlier, La Porta *et al*.'s (1999) analysis points to the negative impact of *interventionist* civil law legal cultures as they usually yield inferior government performance on a range of indicators such as public sector efficiency, provision of public goods, political freedom and corruption compared to those based on the British common law tradition.

The contrary will be the case if the English common law is considered. English common law was designed and shaped by parliament and the aristocracy to reduce the power of the crown sovereign, resulting in a more limited and restrained government, emphasising and protecting the rights of

citizens against the government. In contrast, the French civil law system is more interventionist and does not protect the rights of citizens as much as the common law system. Common law can thus be adopted as a proxy for the intent to limit rather than strengthen the state (La Porta *et al*., 1999; David and Brierley, 1978; Finer, 1997). These are in line with the position by North (1990) which highlighted the path dependency argument which in effect contends that budget systems might trace the path or reflect historical circumstances of the country in question.

Studies by Andrews (2009) and Lienert (2003) also highlight the importance of administrative heritage on budget procedure and practice in Africa. Stylised facts drawn from successive OBI performance surveys reveal the disparity between the level of fiscal transparency in Anglophone and francophone countries, with Anglophone African countries displaying a higher level of fiscal transparency than their francophone counterparts. Austin's (2008) 'reversal of fortune' thesis identified and reinforced the presence of such institutional and economic disparities in former African colonies. The study identified other economic reason that helped to define such disparities. It categorised the type of institutions left by the different colonial powers into two categories: those oriented around protection of private property, and those focused on extracting rents. It concluded that the difference in the type of institutions influenced post-colonial economic fortunes.

We hypothesised a negative relationship between the extent of militarisation of the labour force and fiscal transparency. From our empirical analysis, in line with our *a priori* expectation, the percentage of military personnel, including paramilitary forces, in the population of the country is negatively associated with fiscal transparency and statistically significant in most of our models. In their study on 26 developing countries, drawn from Asia, Latin America and Africa, Tekeng and Sharaf (2015) had similar findings. As explained earlier, in the context of developing countries, heavily militarised countries are characterised by larger military forces and expenditure and are associated with suppression of all forms of freedoms and oppression of the population by the protected government. As such there will be a high level of opacity (less transparency) in terms of government fiscal processes. Such repressive tendencies could thwart civil societies' efforts to hold the government accountable with a view to achieving a greater level of fiscal transparency and better fiscal outcomes.

In line with economic expectations results from our analysis indicate that natural resources as a percentage of GDP in Africa has a negative relationship with fiscal transparency in close to half of our specification models. Thus, there is some evidence, though modest, that natural resource wealth is associated with less fiscal disclosure in Africa. Interestingly, this was recorded when considering models that had political stability, regulatory requirement and corruption as our institutional variable of interest; all of which are key vulnerabilities of mineral-rich countries. Characteristically, a number of previous Extractive Industries Transparency Initiative (EITI) reports attributed part of the problems with the oil mineral sector to unaccounted use of oil revenues and corruption (NEITI 2015, 2015).

Employing the 2008 Open Budget Index, a study by Khagram *et al*. (2013) also revealed a negative and significant association between oil income and fiscal transparency amongst autocratic states. They argued that countries with larger natural resource wealth are less transparent given that larger natural resource wealth could diminish the pressure for transparency because such governments will rely less on non-natural resource taxation to raise revenue. This has evidently been the case with some SSA oil-rich states such as Nigeria. It is pertinent to point out that their study was based on 85 countries, most of which were not SSA countries. Mineral wealth has been associated negatively with fiscal transparency.

Employing a sample of (developed and developing) countries, an empirical study by Ross (2011) revealed that the link between mineral wealth and fiscal transparency is predicated on the prevailing political system in individual mineral rich countries. The study revealed that whereas amongst democracies, a country's mineral wealth is not related to the level of transparency of its it government, the same cannot be said of autocratic states where greater oil wealth was found to correlate with less fiscal transparency, while greater non-fuel mineral wealth is surprisingly connected with better levels of transparency (Ross, 2011). This may serve as a plausible reason for Khagram *et al*.'s (2013) conclusion that findings such as Ross (2011) and theirs lend support to the contentions from other researchers that suggest that oil wealth increases the value of staying in power and therefore causes dictators to reduce transparency, hiding their governments' corruption and inefficiencies (see also Egorov, *et al.* 2009).

As expected, in most instances, the impact of business disclosure on fiscal transparency is positive and significant. This is not dissimilar to earlier findings by Tekeng and Sharaf (2015). The business disclosure index is a measure that shows the extent to which private actors are protected through disclosure of their ownership and financial information. It is employed as a proxy for transparency of the private sector. For the purpose of this study, it is our conviction that transparency in public activities should be accompanied by transparency in the private sector, at least in order to ensure significant detailed information about the procurements and contracts process by government bodies. As argued by Tekeng and Sharaf (2015), if private firms are subject to enhanced demands for transparency, at least when servicing government contracts, this could lead to enhancement in overall government transparency. Our analysis show that GDP growth has a negative relationship with fiscal transparency in all our models. For six of the seven estimated models, examination of growth and fiscal transparency nexus yielded a statistically significant relationship. We had hypothesised an ambivalent relationship between economic growth and fiscal transparency. A positive nexus is expected if the growth is inclusive and thus lead to an improvement in the well-being of the citizenry by providing them with better access to sources of information. They become more knowledgeable about their rights and will be able to seek more transparency in use of public funds. The opposite will be the case if growth has not been inclusive.

5.5.3 Post-estimation robustness checks

Lastly, our post-estimation statistics presented along with our results in Table 5.5 examined the models for the presence of serial correlation and for over-identification with a view to establishing the robustness of our models. To achieve this, we employed the Arellano and Bond and Sargan/Hansen tests for the presence of autocorrelation and over-identification respectively. Dynamic panel data introduces the condition of no correlation in the error term (Cameron & Trivedi, 2009). Arellano and Bond (1991) noted that to achieve unbiased estimations requires the absence of a second-order serial correlation of the error term. By design, the values for the error term could be serially correlated in the first order i.e. AR (1) could be statistically insignificant based on its p-values. However, and as an important rule, a second-order serial correlation will be a sign of misspecification. Hence, our expectation is that the probability of $Ar(2)$ $(pr > z)$ will not be significant at 5%, hence validating the absence of serial autocorrelation in the errors (see Labra and Torrecillas, 2018), where z implies the standard normal distribution. The results of the AR (2-order) test for serial correlation, which is applied to the residuals in differences[21], fails to reject the null hypothesis for a second order serial correlation in all the estimated models.

Likewise, from the Hansen –J statistics reported in Table 5.5, we fail to reject the null hypotheses[22] of the *Hansen* test for over-identification (i.e. the overall exogeneity of the instruments used in the GMM estimation) at the 5% level for all the estimated models. We test for validity of exclusion restrictions using the Hansen –J tests. This leads to our conclusion (acceptance of the null hypothesis) that our over-identification restrictions are also valid.

a. **Null Hypothesis** $(\boldsymbol{H_0})$ **–** All restrictions of over-identification are valid.

b. **Alternative Hypothesis** $(\boldsymbol{H_1})$ – All restrictions of over-identification are not valid.

Acceptance or rejection criteria

$$Prob > x^2 \geq 0.05\ (5\%)$$

If our obtained probability (*p-value*) is ≥ 0.05, the instruments we employed are valid. Hence, over-identification does not exist. And hence there is no evidence to reject our null hypothesis (Baum, 2006). Generally, this indicates that the instruments are valid and the results of our GMM estimation are reliable. We reported the two-step robust standard errors corrected for a finite sample following Windmeijer (2005). Our results satisfy the key assumptions of system GMM estimations by Arellano and Bond (1991) and Windmeijer (2005). As such, our models can be described as appropriate models with which to situate a discussion on the institutional determinants of fiscal transparency in

[21] To check for first-order serial correlation in levels, second-order correlation in differences is checked because for GMM estimator, first-order serial correlation is expected *a priori* in the residuals in differences. Not surprisingly, the AR (1-order) serial correlation test results in most cases reject the null hypothesis of no serial correlation at the 5% level.

[22] The null hypothesis (H_0) for the Hansen test is that all our over-identification restrictions are valid. In other words, the null hypothesis has correct model specification and valid over-identifying restrictions.

SSA. Our empirical results confirm the influence of some institutional forces in determining the level of fiscal transparency in Africa.

5.6 Concluding remarks and policy recommendations

The main objective of this chapter was to empirically examine the link between institutional factors and fiscal transparency in SSA. The theoretical literature and framework contextualised the budget process as a contract between the principals (the voters) and the agents (elected officials). While writing a perfect contract may be daunting owing to information asymmetry, writing a better contract for SSA countries with regard to the budget process is possible by improving the level of fiscal transparency which will increase the level of information available to both parties. This will reduce the level of information asymmetry, especially on the part of the principals (the voters) which will consequently strengthen their capacity for public accountability demand within the retrospective voter's paradigm. Such an improvement in the public accountability process due to a reduction in information asymmetry could aid the writing of a better contract.

Our empirical analysis reveals that an improvement in the overall institutional governance index will lead to an improvement in the level of fiscal transparency in Africa. However, when individual institutional indices are considered, not all the institutional factors have a positive relationship with fiscal transparency. The rule of law, and government effectiveness were statistically significant and positively related to fiscal transparency, while control of corruption, political stability, voice and accountability and regulatory quality did not yield the expected sign.

Within the context of our research question, there are some policy implications that could help improve the level of fiscal transparency in Africa, which in turn, could help write a better contract for the budget process in Africa. As noted by Heald (2013), information flows (disclosure) can be expected to be compromised by attempts to cover the trail of corruption. Therefore, the SSA achievements in the fight against corruption could also contribute to improving the level of fiscal transparency. Shah (2007) argued that while there may be no *'one size fits all'* solution to public finance corruption, streamlining of the regulatory framework and strengthening of enforcement together with building the capacity of public financial accountability institutions will help reduce public finance corruption. Lastly, and perhaps most importantly, there is need for broad, concurrent and comprehensive institutional reforms involving all the dimensions of institutions as well as all the stakeholders in the budget process. Given the aggregate positive impact of the quality of institutions on fiscal transparency, such reforms should cover all the six sub-indices of institutions. This can lead to an increase in fiscal transparency, reducing the level of information asymmetry between the principals and agents in the budget process, and ultimately improving fiscal outcomes and improving public accountability in SSA.

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CHAPTER 6
THE POLITICAL DETERMINANTS OF FISCAL TRANSPARENCY: EVIDENCE FROM SUB-SAHARAN AFRICA (SSA)[23]

6.1 Introduction

The importance of fiscal transparency towards realising desired fiscal outcomes has been established by extant studies such as Alesina and Perotti (1996), Alt *et al*. (2006) and Miles-Ferretti (2004). Similarly, Wehner and de Renzio (2013), Tekeng and Saharaf (2015), Andreula and Chong (2016) and Heald (2013) have identified a plethora of possible determinants of fiscal transparency which can be sub-classified into institutional, political and economic factors. Within the framework of the *principal-agency theory* and the common pool problem, it is becoming imperative to go beyond institutional factors and x-ray the political dynamics that influence fiscal transparency. Such a study in the context of sub-Saharan Africa (SSA) could go a long way in helping to identify some of the reasons why fiscal transparency has been poor in SSA and consequently help provide some of the requisite insights into why fiscal outcomes have also been poor in SSA. In supporting the link between fiscal transparency and fiscal outcome, Eslava (2010) argued that fiscal discipline needs to be enhanced by fiscal transparency as fiscal deficits will be larger in context with less budget transparency. Rogoff (1990) opined that voters observe only part of the visible expenditures of government. Shi and Svensson (2006) argued that opportunistic fiscal deficits could arise if it were permissible for voters to observe all government programmes whilst at the same time making sure that some individuals remain oblivious of the fiscal balance.

The last two decades have seen most African countries transiting largely from authoritarian military regimes to some form of democratic governance ranging from the British parliamentary system of government to the US style presidential system of government. Democracy in Africa has also experienced some deepening of late as evidenced by the peaceful transfer of power from one political party to another in many African states. However, as clearly argued by Schmitter and Karl (1991), elections alone do not equal democracy, even when they are periodically repeated and open to opposition parties. Brownlee (2007) characterised elections *as symptoms, not causes*, whilst Levitsky and Way (2010) argued that multiparty elections are not by themselves an independent cause of democratisation. Hence, it is also obvious that whilst elections are indicators of democracy

[23] This paper was presented at the 2017 African Finance Journal (AFJ) Conference organised at the Elephant Hills Resort, Victoria Falls, Zimbabwe, 17-18 May 2017.

and even potential drivers of democratic progress, the dynamics and interplay of political parties and how they affect the budget process goes beyond mere elections.

An emerging debate is the dynamics of development aid and the role of conditionality as they influence fiscal transparency reforms in SSA. Anwar Shah (2007) highlighted the different types of conditions that come with aid, among which are the governance and institutional reform conditions. Fölscher (2002) buttress this point stressing that aid conditionalities are increasingly emphasising the need for improved transparency and accountability as well as reforms in the budget process of recipient countries. Nevertheless, no known empirical study has been carried out on the impact of such conditionalities on transparency of the fiscal process in the exclusive context of SSA.

Against the foregoing, this paper will focus more on the dynamics and interplay of political forces within a democratic setting and how these forces influence the level of fiscal transparency in SSA. Thus, the objective of this paper is to investigate the nexus between political forces and fiscal transparency in Africa. The rest of the chapter is structured as follows. The background on fiscal transparency and why it is important is in Section 6.2. Sections 6.3 presents stylised facts on the quality of fiscal transparency in Africa vis-à-vis the world, and Section 6.4 reviews relevant literature and provides a theoretical underpinning of the study. Section 6.5 presents the methodology and discusses the results. Section 6.5 concludes with some policy implications.

6.2 Background

Despite the increased interest in the notion of fiscal transparency and its benefits by academics and policy makers, very few studies have explored its political determinants. This is especially so and more worrying as it pertains to SSA, a region of the world that has experienced some of the poorest levels of fiscal outcome and fiscal transparency for quite some time. Glennerster and Shin (2008) and Hameed (2005) revealed evidence that suggests that fiscal transparency is associated with better sovereign bond ratings and greater access to international capital markets. The renaissance in fiscal transparency and its political causes in most developing economies (including African economies) can be attributed to factors such as the current increase in the demand for good governance norms and best practice, political transitions from closed authoritarian regimes to competitive democracy, organised civil society, a more engaged citizenry, and an organised media.

As clearly identified by the earliest work and template on best practices for budget transparency, this area of macroeconomics is completely enmeshed with politics given that fiscal policy is typically concerned with issues of redistribution across individuals, regions and generations, and these are the epicenter of political conflict.[24] The OECD (2002, p. 7), defined fiscal transparency as “the full disclosure of all relevant fiscal information in a timely and systematic manner”. However, the most

[24] See OECD Best Practices for Budget Transparency.

comprehensive definition of fiscal transparency remains that offered by Kopits and Craig (1998 p.1), who defined fiscal transparency as "openness toward the public at large about government structure and functions, fiscal policy intentions, public sector accounts, and projections. It involves ready access to reliable, comprehensive, timely, understandable, and internationally comparable information on government activities – whether undertaken inside/outside the government sector – so that the electorate and financial markets can accurately assess the government's financial position and the true costs and benefits of government activities, including their present and future economic and social implications".

6.2.1 Some stylised facts on the level of fiscal transparency in Africa

Globally, the 1990s and early 2000s saw several countries transiting from authoritarian and mostly single party autocratic regimes and embracing multiparty democratic rules of one form or another. The case was not different in Africa. Prior to this period, governments in most developing countries were characterised by a very low level of transparency and accountability given that there were very few institutions to perform checks and balances in the system of government they ran. Huntington (1991) referred to this period as the third wave of democratisation. Africa was not left out of this wave as most African states also transited from mostly military rule to democratic governance. At the core of democratic governance lies the principle of 'separation of power' or 'checks and balances'. This presupposes that for good economic governance to prevail, the political institutions and forces of the state that facilitate checks and balances must operate optimally. Hence the oversight functions of the parliament to check and exert some form of transparency and public accountability from the executive organ of the government and vice versa becomes sacrosanct. Such demand for public accountability on the efficient use of public resources was highlighted by Schiavo-Campo (2007), who rightly identified transparency and accountability, amongst other factors, as crucial elements of good economic governance.

Fiscal transparency is a vital component of political accountability as it aids voters' understanding of government's fiscal plans and processes. (Von Hagen, 2007). The budget process is a contract of some sort between the principals (the electorate) and the agents (elected officials). Von Hagen (2007) in Shah (2007, p. 37) also argued that an essential condition of the retrospective voting paradigm is "the ability to compare the actual performance of the government against its past plans and intentions".[25] An improved level of fiscal transparency reduces the level of information asymmetry on the part of the electorate which in turn aids voters in making their voting decision within the retrospective voting paradigm. However, understanding the political dynamics of the budget process and how they affect fiscal disclosure is crucial to understanding why fiscal outcomes

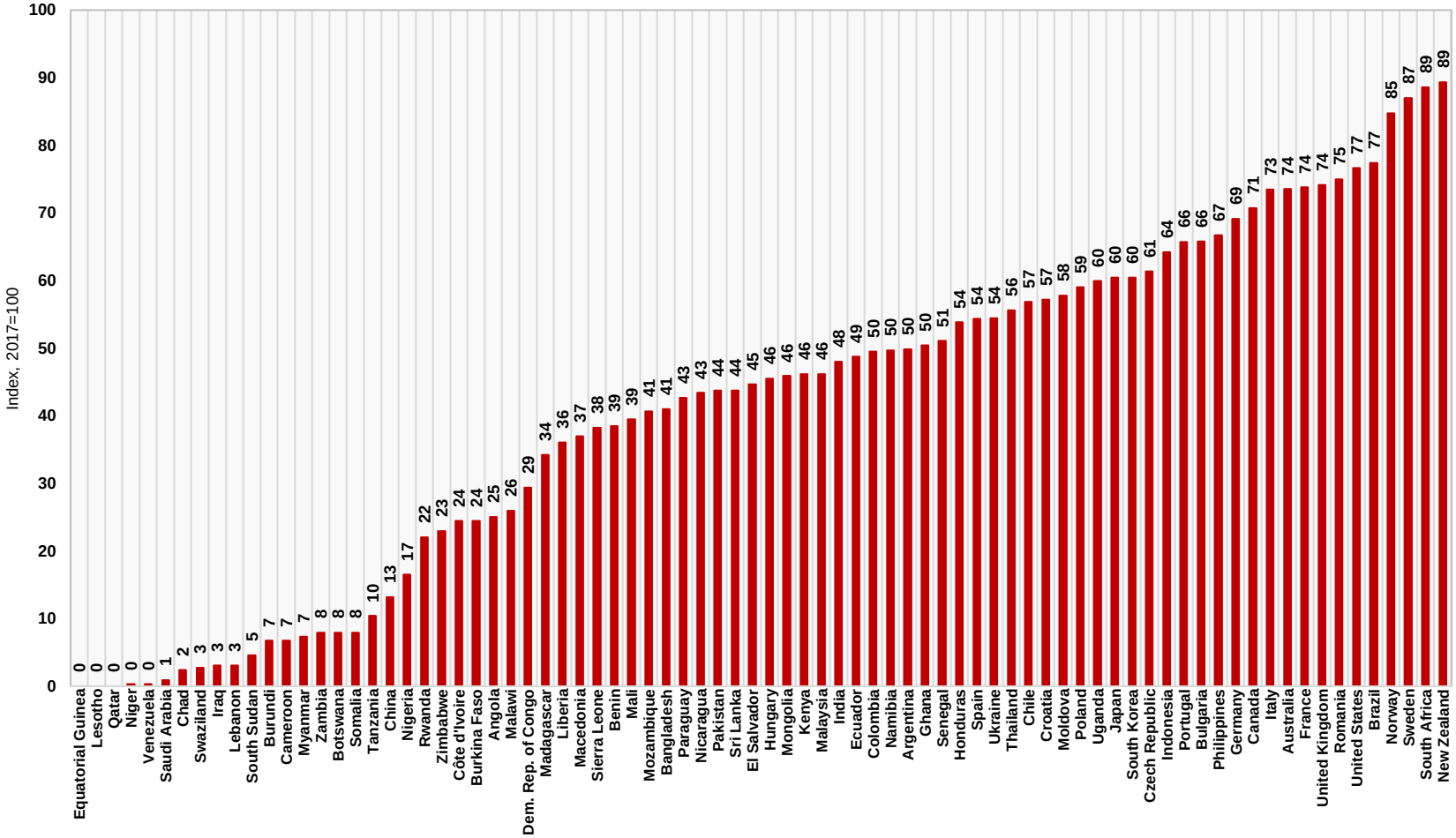
[25] Retrospective voting paradigm refers to the process voting only upon taking into consideration, consideration factors such as the performance of a political party, an officeholder or an administration. It is more concerned with previous policy outcomes than policy instruments.

have been poor in Africa for quite some time. The ensuing question becomes, how is Africa faring in terms of fiscal transparency?

The open budget index, the proxy for fiscal transparency, represented in Figure 6.1 shows that, apart from South Africa which shares the first position with New Zealand and discloses sufficient fiscal information, most SSA countries recorded poor fiscal transparency performance. The closest was Uganda with a score of 60%, which fell under the *limited provision* characterisation. What would be more worrying to fiscal policy makers and stakeholders is that a continent that has evidently and consistently recorded poor fiscal policy outcomes over the years is not making much effort at fiscal disclosure, a key ingredient for helping to address poor fiscal outcomes. Countries such as Lesotho and Niger scored 0, with most African countries scoring low – a categorisation for countries that recorded scores ranging from 0–40%.

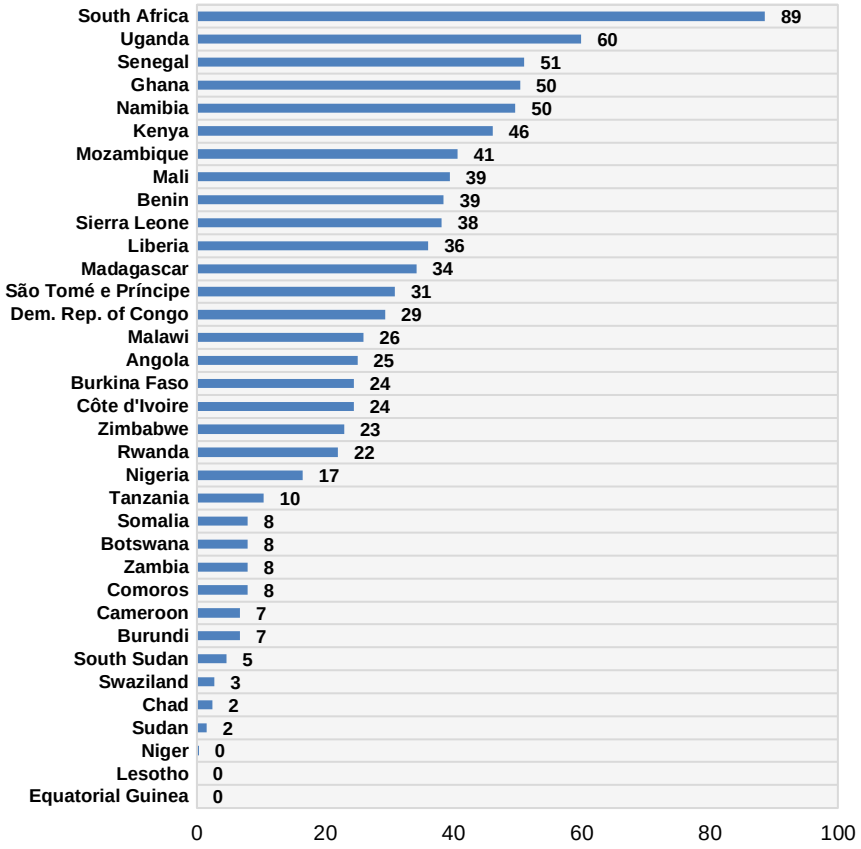
Besides the poor performance of SSA countries already highlighted, it is pertinent to point out that only one francophone country (Senegal) made it into the list of the top five best performing countries in SSA as indicated in Figure 6.2 (the fiscal transparency scores for SSA countries), the other top four were anglophone countries where common law is mostly the legal system in practice. Senegal is a former French colony with a French administrative and legal system. Another important observation from Figure 6.2 is the poor performance of mineral-rich states such as Nigeria, Botswana, Angola and Democratic Republic of Congo. This raises questions such as could there be a nexus between the possession of mineral wealth and the level of fiscal transparency in such a country? If fiscal transparency is this poor in SSA, what role have political factors played towards influencing the level of fiscal transparency in SSA and consequently improving the level of public accountability?

Figure 6.1: Global fiscal transparency levels



Source: Computed by author based on data from International Budget Partnership – Open Budget Index 2017

Figure 6.2: Sub-Saharan Africa (SSA): fiscal transparency performance



Source: Computed by author based on data from International Budget Partnership – Open Budget Index 2017

6.3 Review of literature and conceptual framework

6.3.1 Theoretical underpinning – the Principal Agency theory

A fundamental principle in public finance is that some people are saddled with the responsibility of spending other people's money. As rightly highlighted by Shah (2007), in democracies, voters delegate the power over public spending and taxes to elected politicians. As highlighted earlier, fiscal outcomes, especially deficits, are the products of fiscal transparency. Hence an adequate discourse on the political determinants of fiscal transparency must straddle the political economy of budget deficits, particularly macroeconomic populism and opportunism and common pool problems, as well as the challenges emanating from the principal agency relationship in the budget process. The theories underlying these three problems best explains the political forces behind the level of fiscal transparency experiences and why budget deficits persist in most developing countries, particularly SSA countries.

Beginning with the principal-agency problems, Von Hagen (2007) contextualised the budget process arrangement with his twin arguments of the tendency for *principal-agency* problems and the common pool problems. A key suggestion as to why policy makers or politicians (agents) prefer an opaque

fiscal process is their fear of potential backlash from their principals (the electorate) who hire and fire them via elections when poor fiscal outcomes are recorded or at the first sign of unexplained secrecy on how government finances are being managed. The *principal-agency* relationship is characterised by imperfect and asymmetric information which allows fiscal policy misconduct by self-interested agents. Within the framework of the *principal-agency* relationship, the obligatory release of fiscal information introduced by fiscal transparency measures will lessen the level of information asymmetry which was to the benefit of elected officials. As a result, this will consequently ease the monitoring of the agents (elected officials) by the principals (the electorate) and increase public accountability. Improvements in the level of fiscal transparency would facilitate the emergence of a government that will be more accountable and responsive to the electorate.

Fiscal transparency thus become a crucial tool for rewarding (voting in) or sanctioning (voting out) agents as it helps voters to understand government's fiscal plans and actions. Lindstedt and Laurin (2010) sum it up by describing fiscal transparency as the indispensable driver of the process of demanding public accountability from fiscal policy decision-makers (politicians) and, by extension, shows the effectiveness of citizens' delegating power. As aptly described by Persson *et al.* (1997) and Seabright (1996), the *principal-agent* relationship is akin to an incomplete contract. This is owing to the fiscal information deficit between the electorate and the elected officials, which the officials will want to use strictly to their own advantage, leaving politicians with substantial residual powers over the electorate. The greater these residual powers are, the greater will be the divergence between voter preferences and actual policies. On their part, the electorate will want to reduce such privileges by subjecting politicians to stringent public accountability. Florinni (2000) argued that the value of transparency lies in its role as an evaluation tool helping to overcome or reduce the *principal-agent* problems, particularly the challenges that principals have in ensuring that agents' actions are in tandem with what the principals want them to do, as against the interest of the agents.

The common pool problem arises when politicians' (or parties') support increases in targeted spending that provide their constituencies with more public services for which they are responsible for barely a fraction of the total cost given that the spending is financed by general taxation. This ultimately results in a spending and deficit bias (Velasco, 2000; von Hagen, 2007). It is very important to point out that such situations are associated with a less transparent budget process. The common pool problem is at the heart of some of the externalities in managing public finances. Common pool problems emanate from heterogeneous interests across groups of voters and have been advanced by Eslava (2010) as another possible reason for pervasive deficits. Influential works by both Weingast *et al.* (1981) and Baron and Ferejohn (1989) expound the fiscal influence of such heterogeneous interest groups on the budget. They attributed the problem to different agents (elected officials) making budget decisions whilst representing different groups that are interested in varied government-funded projects under a centralised government revenue framework. The

resultant effect is that each group internalises the full benefit of specific projects, but only pays part of the cost, as the cost is shared by all the groups. This results in over-provision of government projects. Therefore, the size of the budget and the deficit increases as the number of districts involved in the design of the budget increases for a given revenue.

The political economy hypothesis on the causes of fiscal deficits has also gained traction for quite some time. Particularly, the role of both macroeconomic populism and macroeconomic opportunisms has been emphasised. According to Dornbusch and Edwards (1990) as cited in Hossain and Chowdhury (1998), macroeconomic populism denotes a situation where a populist government undertakes ambitious programmes and gives priority to distributive objectives.

Macroeconomic opportunism arises when non-democratic regimes attempt to maintain and legitimise their rule by buying allegiance of political elites of both the left and right. Hossain and Chowdhury (1998, pp. 152-153) surmised that “they are a reflection of the weakness of the state where government has either caved in to the demands of narrow interest groups or courts interest groups for its survival.” In identifying the structural causes of budget deficits in developing countries, one of the key issues identified by Tanzi (1982) as cited in Hossain and Chowdhury (1994) is the increased expenditure for political exigencies. This buttresses the notion that macroeconomics of deficits is interwoven with the state of national politics. In any country where the politicians are not accountable for the consequences of their policy decisions, they can get away with policy profligacy without worrying about the welfare of the citizenry.

The very persuasive work by Eslava (2010) on the political economy of fiscal deficits concluded with findings that reinforce the position of Dornbusch and Edwards (1990) and Hossain and Chowdhury (1994). More Specifically, Eslava (2010, p. 665) argued that deficits may arises from diverse preferences and the conflicts of interest therefrom. It highlighted the following political economy related conflicts as causes of fiscal deficits: “i)deficits arising from the opportunistic motivations of incumbents trying to improve their chances of staying in office; (ii) deficits arising from the partisan preference of incumbents who either run deficits as a direct reflection of their preference for large governments, or run deficits to tie the hands of successors with different fiscal preferences; (iii) deficits that arise as the result of the fight of group with conflicting interests for a fixed pool of resources” (Eslava, 2010 p.665).

It can be inferred from the aforementioned points by Eslava that the absence of transparency could allow incumbents to end up generating deficits with the view to convincing voters about their competence as providers of public goods. Drazen (2000) shared similar views pointing out that heterogeneity and conflicts of interest are vital to any political economic analysis. The case is not different when considering political and economic analysis of fiscal deficits and its causes. She went further to classify the theories elucidating the rifeness of fiscal deficits according to their origin as:

"preference heterogeneity between policymakers and voters (i.e. *principal-agent* relationship); heterogeneity of fiscal preferences across politicians (i.e. partisanship); or heterogeneity of fiscal preferences across social groups or regions" Eslava (2010, p. 646). Heterogeneity of fiscal preferences across social groups or regions can be best captured or described by the degree of polarisation or ethno-fractionalisation in a country. More so, Eslava (2010) argued further that fiscal discipline should be enhanced by transparency of the budget process as well as setting numerical limits to the deficits. It is imperative to point out that whereas African countries have tried setting numerical fiscal limits, not very much has been achieved in terms of fiscal transparency, hence necessitating a study such as ours.

6.3.2 Review of relevant literature

As highlighted earlier, whilst a significant amount of work has tried to examine the benefits of fiscal transparency, no known study has examined the relationship between political forces and fiscal transparency in the context of SSA. Our new interest may be owing to a gamut of factors most of which are akin to those put forward by Khagram *et al*. (2013) who itemised four key causal triggers (political transitions, fiscal and economic crises, political and corruption scandals, and external influences) whose complex interaction advances or impedes fiscal transparency. Khagram *et al*. (2013) opined that these triggers generate opportunities as well as incentives for players such as political leaders, CSOs and civil servants to take actions in planning, implementing and sustaining reforms with a view to enhancing fiscal openness.

Over the past two decades, most African states have migrated from "closed" authoritarian regimes to multi-party democratic states. Huntington (1991) and Giovanni and Andrea (2016) described this period as the third wave of democratisation. Multiparty democracy as described by Khagram *et al*. (2013) is typified by separation of power, policy contestations, party competition, organised civil society organisations, engaged citizenry and an active media, all of which are crucial to a transparent society. Preceding this period, many African countries were previously characterised as closed, authoritarian regimes. Characteristically, such closed states were characterised by very poor transparency thresholds given the dearth of institutions for checks and balances in such systems.

Fiscal and economic crises can trigger calls for higher levels of fiscal transparency. Various regional and global financial crises increased the need to reassess international efforts to promote fiscal transparency for two reasons. First, such crises revealed that most (developed and developing) governments had an inadequate understanding of their existing fiscal position as revealed by the emergence of previously unrecorded deficits and debts. The situation could be worse for SSA which Lledo and Poplawski-Ribeiro (2013) characterised as possessing weak budget procedures and inadequate budget institutions. Prior studies such as Caprio (1998) corroborate this position. Focusing on the causes of the Asian financial crises, Caprio (1998) showed that the worst hit Asian

countries during the financial crises were also the least transparent Asian countries. Second, as argued by Vishwanath and Kaufmann (1999), paucity or lack of transparency poses as a constraint on economic policy and social outcomes, negatively affecting welfare and development.

Globally, political corruption scandals have emerged as triggers of fiscal transparency. Opposition parties often exploit reports of political corruption scandals amongst the ruling party as an opportunity to sell the lack of transparency and accountability of the ruling party before the electorate, and the opposition as a viable alternative. In the context of SSA, this seems to have had some effect as the promise of a viable alternative and a more accountable and transparent government by the opposition parties potentially contributed to the flurry of civil changes of governments via elections in the last four years (Van Gyampo *et al.*, 2017; Owen and Usman, 2015). Itodo and O'Regan (2018) concurred with the role that political and corruption scandals play in triggering fiscal transparency and accountability. Notably, on Africa's most populous country (Nigeria), they argued that an invigorated push for transparency and accountability was needed in Nigeria owing to an increased level of activism coupled with a desire to collectively and robustly confront corruption. External influence is also a trigger on fiscal transparency. This mostly emanates from recent foreign policies by the insistence of major international donor countries and agencies such as the IMF, the United States Agency for International Development (USAID) and UK Aid Direct (UKaid) on tying future foreign aids to reforms related to improvements in fiscal transparency (Drummond, 2011). Acemoglu *et al.* (2003) described countries as possessing strong institutions if they are democratic, have relative equality, suffer few radical social cleavages, and have a variety of checks and balances on political behaviour. Wehner and De Renzio (2013) opined that government's decision to publish or withhold information is primarily political, and thus it is likely it to be influenced by citizens via their exercise of the right to vote, and by the nature of party politics and political competition.

From our theoretical underpinning, we opined that public accountability can only be enhanced via an improved level of fiscal transparency and vice versa. Generally, accountability can be defined as possessing the capacity to hold public officials to task for their actions or inactions. Whilst the public hold public officials to task via the power of their votes, parliament, whom the public vote in, are saddled with the direct responsibility of constantly demanding full disclosure from the executive via their oversight and public accountability functions, to establish whether or not there was corruption or waste and to ask for 'value for money'. The World Bank (2006) summed it by defining oversight as "the monitoring of executive activities for efficiency, probity, transparency and fidelity, to ensure that funds appropriated by the parliament are used legally, effectively and for the purpose for which they were intended." However, in some cases, it has been the case where coincidentally, the parliament is dominated by Members of Parliament (MPs) from the same political party as the sitting president. Under such a scenario, the demarcation between the tendency for the MPs to toe the party line and loyalty to the independence of the parliament can become blurred. When party loyalty

takes precedence over legislative independence, public demand for fiscal transparency and hence public accountability will be sacrificed. This is where expectations of a healthy contentious atmosphere between parliament and the executive on the transparency of the budget process could be weakened, creating a weakened version of scrutiny and effectively reducing the legislature to a 'rubber stamp' in most SSA countries.

As aptly highlighted by Alesina and Perotti (1996), politicians typically do not have an incentive to adopt transparent practices. However, there are situations where politicians can implement transparent practices. Reacting to this position, Alt and Lassen (2006a) argued that should there be frequent political turnover, it would be in the interest of political parties to implement transparent political budget institutions with a view to decreasing opportunistic behaviour and consequently debt accumulation. However, this may not necessarily be the case in Africa as most of its prior governments were largely described as *sit tight* and it was only until recently that it began experiencing a considerable level of political turnover.

Employing a robust data set on budget transparency developed by the IBP for 85 developed and developing countries, a study by Wehner and De Renzio (2013) explored the relationship between fiscal transparency and two critical sources of demand for fiscal transparency: citizens and legislators. Their study revealed a positive relationship between partisan fragmentation (i.e. political competition) and fiscal transparency. A few studies have been carried out to examine the relationship between ethno-linguistic fractionalisation[26] (political polarisation) and fiscal transparency. La Porta *et al.* (1999) was one of the earliest studies to suggest that ethnofractionalisation is important in government activities, stressing, however, that legal origin was more important. Other early studies such as Canning and Fay (1993) and Mauro (1995) also highlighted the influence that ethnic fragmentation has on governments' activities as well as the general quality of institutions. Studies such as Alesina and La Ferrara (2002) and Goldin and Katz (1999) all hinted at the negative impact of ethnically fragmented societies on efficiency, participation in social activities and most importantly, that *trust is lower* in economic decisions such as provision of public goods etc.

Heavily fragmented societies have revealed evidence of poor and inefficient management of the economy. Easterly and Levine (1997) and Alesina *et al*. (1997) suggested that ethnic diversity lowers a country's economic growth rate as well as provision of public goods. Ethno-linguistic fragmentations have been identified in the governance literature as contributing to poor outcomes. However, Wehner and De Renzio (2013) found a positive but statistically insignificant relationship between ethno-fractionalisation and fiscal transparency. Andreula *et al*. (2009) and Andreula and Chong (2016) found a positive relationship between fiscal transparency and ethno-fractionalisation,

[26] A full description of ethnofractionalisation is provided in the methodology section (5.4.1). In the course this study ethnic and ethno-linguistic fractionalisation are used interchangeably.

although unlike Wehner and De Renzio (2013) both Andreula *et al*. (2009) and Andreula and Chong (2016) found the impact was statistically significant.

On the nexus between administrative heritage and fiscal transparency, studies by Alt and Lassen (2006) found a significant and positive relationship between common law (the opposite of civil law) and fiscal transparency. Similarly, and in line with expectations, using civil law as a measure of administrative heritage, Wehner and De Renzio (2013) found a negative relationship between civil law and fiscal transparency. Employing data from the 2006 open budget index survey, de Renzio *et al*. (2009) discovered that resource-dependent countries suffered from what they described as a transparency gap. As pointed out by Ross (2011) non-resource rich countries record higher fiscal transparency scores than resource-rich countries. An emerging but very important political driver of the level of fiscal transparency is the role played by foreign aid. Although an economic variable, it is gradually assuming the role of a political instrument with which donor countries seek greater fiscal transparency from recipient developing countries. Over the last decade, as a precondition for granting aid, most economic and political superpowers now demand improvements in the level of fiscal transparency in recipient countries. However, there are no known empirical reports on how much impact such policies have had on fiscal transparency in SSA (Drummond, 2011).

6.4 Methodology

This section entails a detailed outline of the econometric models and the underlying partisan and political forces influencing variations in fiscal transparency in SSA as well as the estimation procedure employed. The analysis spans the period 2006-2015. The section also provides a description of the data set employed as well as the sources and mode of measurement. Table 6.1 presents a description of the variables and source of data.

6.4.1 Variables, data sources and definition

The first subsection entails a presentation of our descriptive statistics. Our measure of administrative heritage is based on the legal systems practiced by the various SSA countries. We employ dummy variables (1) for countries that practice civil law and (0) for countries that do not practice civil law. Civil law, which is rooted in the French legal system, was chosen as our preferred dummy variable measure of administrative heritage. This is partly because the notion of citizens' right to fiscal information has its roots in article 14-15 of the French 1789 Declaration of Rights of Man and Citizen which stipulates that society has the right to ask an official for an accounting of his administration. La Porta *et al.* (1999) argued that interventionist legal traditions predicated on civil law yield inferior government performance on many indicators, including corruption than those based on the British common law tradition.

Table 6.1: Sources and definitions of variables

Variable	Definition and mode of measurement	Data source
Ft	Fiscal Transparency is the degree of budget transparency ranging from 0 (complete lack of transparency) to 100 (full transparency).	International Budget Partnerships, Open Budget Survey (2006-2015)
Civil laws	We employed dummy variables as proxy for administrative heritage. Dummy variable =1 if legal origin of country is French, 0 otherwise	Author's computation
Partisan Fragmentation 1	The sum of the squared seat shares of all parties in the government. It measures the multiplicity of political parties in a country.	Inter-American Development Bank's Database of Political Institutions 2018 (Cruz *et al*., 2018).
Partisan Fragmentation 2	One (1) minus the sum of the squared seat shares of all parties in the legislature. Independents are counted as single-member political parties. It measures multiplicity of political parties in a country, taking into consideration independent candidates. This technique of partisan fragmentation measurement is in line with Beck *et al*. (2001).	Inter-American Development Bank's Database of Political Institutions 2018 (Cruz *et al*., 2018).
Ethno-Fractionalisation	One minus (1) the Herfindahl index of ethno-linguistic group shares and represented by the probability that two randomly selected individuals from a population belong to different groups. It ranges from 0 to 1, where 1 connotes a highly heterogeneous ethno-linguistic society.	Alesina *et al*. (2003).
Checks	Check and balances is a measure of the legislative and executive indices of electoral competitiveness (LIEC and EIEC).	Inter-American Development Bank's Database of Political Institutions 2018 Cruz *et al*. (2018).
Military	Number of military personnel as a percentage of the total labour force.	World Bank's World Development Indicators (WDI) 2016
Aidgdp	Total aid received as a percentage of GDP.	World Bank's World Development Indicators (WDI) 2016
Natres	Natural resource revenue as a percentage of GDP.	World Bank's World Development Indicators (WDI) 2016
Growth	Growth rate as a percentge of GDP at market prices.	World Bank's World Development Indicators (WDI) 2016
Popngrowth	The growth rate (in %) of the number of people in a particular country,	World Bank's World Development Indicators (WDI) 2016

Source: Computed by the author

Similar to the methods employed by Laakso and Taagepera (1979), Lijphart (1999) and Wehner and De Renzio (2013), we employed a Herfindahl index-based measure of partisan fragmentation. This was calculated using the seat shares of political parties represented in the legislature as

$$\textbf{\textit{Herfindahl index}}: H = \sum_{i=1}^{n} s_i^2$$

where s_i represents the seat share of party *i* in the government and *N* is the number of parties. H is the measure of partisan fragmentation. Our choice of this measure is predicated on the notion that when more parties are represented and the more evenly their power is distributed, executive control of the legislature is more difficult. Following Persson *et al*. (2007) and Wehner and De Renzio(2013), we took the sum of the squared seat shares of all parties represented, with independents treated as single-seat parties for this purpose, and subtracted them from one (1). Our resulting partisan fragmentation index (partisan2) takes a value of zero whenever a single party occupies all seats in the legislature and very close to 1 whenever each seat belongs to a different political party. However, not all SSA countries provide for the existence of independent candidature in elections (partisan1). In computing this measure, we extracted annual Herfindahl scores based on legislative seat shares from the Inter-American Development Bank's Database of Political Institutions 2018 (Cruz *et al.,* 2018).

A key distinguishing feature of a democracy is the presence of an independent legislature which is expected to guarantee checks and balances on the activities of the executive arm of government. The key legislative function of the parliament is legislative budget oversight and ensuring public accountability. This entails a frequent scrutiny of public accounts and ensuring value for money and making public findings from their audit investigations. Whilst the public always want fiscal transparency (transparency on how the executive branch is spending public funds), voters cannot easily demand it. Hence, we would expect greater transparency as checks and balances increase, although there is not so much offsetting effect of checks and balances emanating from a coalition government.

Our measure of ethnic-fractionalisation is a Herfindahl -based measure derived as follows:

$$Ethnofract_j = 1 - \sum_{i=1}^{N} s_{ij}^2$$

Where s_{ij}^2 represents the share of group i $(i = 1 \ldots N)$ in country *j*, thus, $Ethnofract$ is computed as one minus the Herfindahl index of ethno-linguistic group shares and represented by the probability that two randomly selected individuals from a population belong to different groups (Alesina *et al*., 2003).

It is germane to point out that parties in a coalition might value opacity in their own spending (e.g. in the ministries that they control) more than they value transparency in the spending of other ministries not controlled by them. However, it is also imperative to point out that coalition parties are not very common in SSA, unlike in European democracies. Most times the experience is a merger of parties into one before national elections so that effectively they become one party, as was the case in Nigeria and Kenya in 2014 and 2016 respectively. Thus, it becomes safe to assume, *ceteris paribus,* that an improvement in the checks and balances score will lead to an improvement in fiscal transparency in SSA. In our analysis, check and balances (check) is a measure of the legislative and executive indices of electoral competitiveness.

6.4.2 Estimation of the political forces influencing fiscal transparency in SSA

Our empirical analysis will rely on the dynamic panel data model. This is predicated on the fundamental advantages of the dynamic panel data methodology in comparison to the static models, as well as the advantages of the panel data technique over cross-sectional techniques. Essentially, these advantages enable us to investigate our phenomenon of interest. As rightly argued by Labra and Torrecillas (2018:2), the dynamic panel data gives us the possibility of addressing the heterogeneity of the individuals as well as the use of several instrumental variables in order to deal with all sources of endogeneity of the variables in the model also known as the lagged variables. Endogenous models dependent largely on their past and accumulative process (Nelson and Winter, 1982; Dosi, 1988).

The dynamic panel model permits the inclusion of an endogenous structure into the model via instrumental variables. Endogeneity emanates from the existence of correlation between the dependent variable and the error term. This is also related to the causal relationship between the explanatory variables of the model (Mileva, 2007; Wooldridge, 2013). It may also emanate from poor data quality, autoregression and autocorrelated errors and/or omission of relevant variables. Largely, panel data econometric analysis comes with some advantages over cross-sectional studies (Hsiao, 2007). First, it permits us to gain more degrees of freedom through an increase in the variability of data, ensuring a greater level of sample variability than would be the case if a cross-sectional technique was employed. Also, as highlighted by Wooldridge (2010), cross-sectional regression estimates could be biased as a result of risks emanating from omitted-variable bias.

Our hypothesised nexus between political factors and fiscal transparency in SSA is represented with the following panel data model:

$$FT_{it} = \beta' x_{it} + \varepsilon_{it}\ i = 1, \ldots\ldots N; \ldots\ldots\ldots, T \tag{6.1}$$

Where FT_{it} represents fiscal transparency measured in percentage for country i at time t, x_{it} represents a set of time varying as well as time invariant covariates, and β' represents the associated

vectors of parameters we intend to estimate. The composite error term ε_{it} is represented as $\varepsilon_{it} = \psi_i + \epsilon_{it}$, where ψ_i represents the unobserved country specific effect and ϵ_{it} is the idiosyncratic error term. Our explanatory variables include partisan fragmentation1; partisan fragmentation2; Checks and balances; Ethnofractionalisation; Civil law; Military; Natural Resource (percentage of GDP); Growth, Population Growth and Aid % GDP (see definitions in Table 5.1). Our empirical models will examine the nexus between our determinant variables and fiscal transparency in SSA. In line with studies by Alt and Lassen (2006), La Porta *et al*. (1999), Wehner and De Renzio (2013) and Khagram *et al*. (2013), the level of political competition in a country has been found to wield a positive and significant influence on the level of fiscal disclosure. However there exist two variants of how to measure the level of competition in a country: those employed by Beck *et al*. (2001) and Cruz *et al*. (2018). Both of them are Herfindahl index based, but while the Beck *et al*. measure discounts for the existence of independent candidates, the Cruz *et al*. measure was used in its raw form without discounting.

Recall that in a democratic setting, calls for accountability are demand-driven; hence our analysis will focus on the roles of both legislators and citizens in determining or influencing the level of fiscal disclosure by the government. A similar position was argued by Benito and Bastida (2009) by emphasising the need for an effective legislature and a robust civil society. As an innovation for capturing how effective the legislature in Africa has been in demanding fiscal transparency from the executive, we included the Cruz *et al*. (2018) measures of checks and balances in our model.

Over the years, the relationship between partisan fragmentation and fiscal transparency has been examined but limited to studies that were not exclusive to SSA. Alt and Lassen (2006) focused on OECD countries and found a positive relationship between political competition (often used interchangeably with partisan fragmentation) and the level of fiscal transparency. Similar findings were recorded by Khagram *et al*. (2013) and Wehner and De Renzio (2013). Studies including Easterly and Levine (1997), Alesina *et al*. (1997) and Wehner and De Renzio (2013) highlighted the negative nexus between ethnically fragmented societies and efficient management of the economy. Following the extant studies, the relationship between political polarisation measured by ethno-linguistic-fractionalisation and fiscal transparency has also been examined, with findings that were contrary to the hypothesised negative association (e.g. Andreula *et al.,* 2009; Wehner and De Renzio, 2013; Khagram *et al.*, 2013).

Andreula *et al.* (2009) found a significant positive relationship between Ethnofractionalisation and fiscal transparency. Like Andreula *et al.* (2009), Wehner and De Renzio (2013) found a positive but insignificant relationship between political polarisation (ethnofractionalisation) and fiscal transparency. A similar result was recorded by Khagram *et al*. (2013). A plausible explanation for such unexpected findings may be attributed to the fact that in some situations, the unintended outcome of extreme vigilance by the different ethno-linguistic groups on the central government

public expenditure pattern for fear of marginalisation of linguistic groups yields an improvement in fiscal transparency. Hence, unlike with other economic and institutional inefficiencies such as poor economic growth which are associated with high ethnofractionalisation, the reverse could be the case when it comes to demand for fiscal transparency. This is especially so as overwhelming empirical evidence lends support to a positive link between ethnofractionalisation and demand for fiscal transparency.

The socioeconomic control variables considered include administrative heritage proxied by civil law or type of legal system, military expenditure, revenue derived from natural resources as a percentage of GDP; business disclosure (business), aid as a percentage of GDP, and growth and population growth rate (Popngrowth). These socioeconomic factors may affect fiscal transparency positively or negatively. Studies such as Wehner and De Renzio (2013) and Tekeng and Sharaf (2015) showed that natural resource wealth has consistently being negatively related to fiscal transparency. This may not be unconnected with the *rentier state* nature of such economies and their attendant vulnerabilities such as corruption which studies such as De Simone (2017) show is negatively correlated to fiscal transparency. The poor level of transparency in the extraction of such natural resources may also be a contributing factor. Private disclosure and overall government disclosure are connected. Tekeng and Sharaf (2015) underscores this point, arguing that subjecting private firms to a high demand for transparency, at least when servicing governments contracts, could contribute to an overall improvement in government transparency.

We included a variable measuring the share of military personnel out of the total population of country (World Bank, 2016) with a view to establishing the degree of sway wielded by political regimes or administrations at the expense of freedom of expression. The degree of militarisation of a country relative to the total labour force is likely to be negatively associated with fiscal transparency (Tekeng and Sharaf, 2015). From the perspective of developing countries, larger armed forces can be linked to less transparent government policies for two reasons. Tekeng and Sharaf (2015) buttress this point, stressing that the prominence of the size and role of the armed forces is connected to the likelihood of oppression by the protected government over the population. This could impede civil society's efforts to hold governments accountable for the outcomes of its policies. And large armed forces could be connected with high-handed and opaque government expenditure on military equipment.

Civil law is rooted in the French legal system. It was selected as our preferred dummy variable measure of administrative heritage. In line with the *a priori* expectations, Alt and Lassen (2006) found a significant and positive relationship between common law and fiscal transparency. Similarly, using civil law as a measure of administrative heritage, Wehner and De Renzio (2013) revealed a negative relationship as expected although it was not statistically significant. Population growth is expected to have a positive relationship with fiscal transparency: population growth in nations will increase the

pressure for judicious and transparent use of resources. However, economic growth is expected to yield an ambivalent relationship with fiscal transparency. When growth is knowledge-based and inclusive, it will yield an improvement in general well-being in the citizenry. Under such a scenario, the citizenry will be more knowledgeable of their rights and will be able to seek more transparency in the use of public funds. The opposite will be the case if growth is strictly commodity-based (or not knowledge-based).

Equation 6.1 assumes that fiscal transparency responds to changes in the covariates instantly. This is a major concern with the regression as in reality, such covariates could impact on fiscal transparency with some lags. Additionally, preceding levels of fiscal transparency could potentially influence subsequent fiscal transparency levels. De Renzio (2011) rightly suggests that current levels of fiscal transparency influence future transparency levels given that part of the major preconditions by donor countries for future aid is an improvement by recipient countries on their current levels of budget transparency. Moreover, a contemporary published level of fiscal transparency usually leads to calls by CSOs for future improvement, especially against the backdrop of the abysmal level of fiscal transparency performance amongst African countries. Consequently, we consider a dynamic model given its provision for partial adjustments in this fashion:

$$FT_{it} = \beta_{ft} FT_{i\,t-1} + \beta' x_{it} + \varepsilon_{it} \tag{6.2}$$

Where $FT_{i\,t-1}$ is the lagged dependent variable, and β_{ft} represents our measure of adjustment process, which is expected not to be greater than one (1). All our variables previously defined above are contained in x_{it}, fiscal transparency measured in percentage, and $fT_{i,t-1}$ is its lagged value (dynamic component). x_{it} represents a matrix of the components of our political variables as well as our control variables.

Equations 6.1 and 6.2 represent the static and dynamic fiscal transparency models respectively. The static panel model may be predisposed to limitations such as endogeneity and unobserved heterogeneity as well as cross-sectional dependence challenges. Whereas the unobserved heterogeneity effect can be addressed using the fixed effect (FE) estimator by treating the unobserved effects as time invariant, the random effect (RE) estimator is employed whenever statistical evidence suggests that the unobserved heterogeneity is a random variable and is not correlated with the covariates (x_{it}).[27] Endogeneity problems could emanate from political factors, or from omission of other relevant variables from the model. The unobserved time invariant heterogeneity issues and the endogeneity issues can be addressed using the IV estimator that is based on FE. Nevertheless, results from both the FE and IV could be biased due to the presence of

[27] The choice between FE and RE estimators is determined by carrying out the Hausman test with a null hypothesis (H_0): unobserved heterogeneity (ω_i) is not correlated with the covariates (x_{it}). Under the null Hypothesis (H_0), the RE is consistent and efficient. Regardless of whether or not H_0 is true, the FE estimator is always consistent, the random effect is best if H_0 is true as in the Best Linear Unbiased Estimator (BLUE).

a cross-sectional relationship. It is noteworthy that SSA countries may be made up of independent states, however, there still exists the possibility of identical responses from countries to common shocks. This implies that some of the political or socio-economic factors considered in the model and ultimately fiscal transparency may be correlated.

The dynamic panel model (Equation 6.2) is predisposed to some econometric challenges such as those highlighted above. This is further complicated by challenges presented by correlation between the lagged dependent variable and the error term, specifically with regard to the unobserved country-specific heterogeneity ψ_i. In addition to these challenges, given that FT_{it} is also a function of ψ_i which is time invariant, our inclusion of $FT_{i\,t-1}$ as one of the regressors in Equation 6.2 could correlate with ψ_i, and hence with ε_{it}. Also, the presence of the lagged dependent variables $FT_{i\,t-1}$ as one of the regressors in the model could lead to autocorrelation challenges in the model. As aptly argued by Roodman (2009), given such situations, employing the OLS technique will yield biased and inconsistent estimates and it would be better to adopt the GMM technique over the FE and IV estimators. Furthermore, as highlighted by Bond (2002), the panel data estimator permits the consideration of the dynamic process which is very important for recovering consistent estimates of the parameters of interest.

To avoid results that are potentially biased in our empirical analysis, we adopt the Arellano and Bond (1991) GMM estimator as it controls for the unobserved country heterogeneity (country-fixed effect), endogeneity (bi-directionality) of the explanatory variables, and the lagged dependent variable to estimate our dynamic model. More importantly, the dynamic panel GMM methodology will permit us to treat fiscal transparency as a dynamic process as well as addressing such issues of bi-directionality.

Two types of GMM estimators exist: the difference GMM (DGMM) estimator and the systems GMM (SGMM) estimator. Our estimations of the empirical relationship between fiscal transparency and our variables of interest will rely on the SGMM estimator given that it has proven to be more efficient (Arellano and Bover, 1995). When the SGMM is employed, additional instruments are easily obtained from the system of two equations (a differenced and a level equation). The addition of the second equation yields more instruments. The SGMM is more suitable and particularly applicable for our study as it is designed for situations with short time periods and many countries (Roodman, 2006). This clearly fits our dataset which has a short time period of five, and a large number of SSA countries (23 countries).

Likewise, two types of systems GMM estimator exist – the one-step estimation and the two-step estimation. We employed the two-step estimator which has the Windmeijer (2005) corrected standard errors because it is asymptotically more efficient than the one-step estimator. We used the orthogonal deviation commands given that we have a panel with gaps. This is with a view towards

maximising the sample size. In conclusion, in checking for consistency of our estimates, we used two specification tests, the Arellano and Bond Sargan test for second-order serial correlation in the error term and the Hansen test of over-identification restrictions. The Sargan/Hansen test measures the validity of the instruments by analysing sample analogues of the moment conditions used in the estimation. By design, the error term may be serially correlated in the first order. Nevertheless, having second-order serial correlation will be a sign of misspecification, consequently, the AR (2) should not be significant.

To achieve normality of our response variables and overcome potential skewness, we took a log transformation of our key response variables i.e. partisan fragmentation1 (lpartisan1), partisan fragmentation2 (lpartisan2), checks and balances (lcheck), and ethno-linguistic fractionalisation (lethnofract). Also, and very important, throughout the estimation, as a rule with system GMM technique we made sure the number of instruments was never more than the number of groups. We also looked at the trend of our control variables, i.e. natural resources as a percentage of GDP, military expenditure as a percentage of GDP, administrative heritage proxied by the legal system practiced (civil or common law), population growth, business environment and economic growth, and population growth. As earlier argued in line with Hurlin and Mignon (2007), there was no need to carry out the panel unit root test owing to the small sample nature of the study (unbalanced panel of 3-5 years) for just 23 countries. Hurlin and Mignon strongly argue that unit root tests generally have low power in small sample sizes to distinguish non-stationary series from stationary series that are persistent. Increasing the power of unit root tests will entail increasing the number of observations: this is not feasible in our case given our fixed scope of study (SSA) and a maximum period of 3-5 years.

6.5 Empirical results and discussions

6.5.1 Summary statistics and correlation matrix

In this section, our preoccupation is on presentation and discussion of the empirical results from our model estimations. We begin with the descriptive statistics followed by the presentation of the correlation matrix and finally, the formal presentation of our empirical analysis that tests our hypothesised relationships. The descriptive statistics are presented in Table 6.2. Our summary statistics reveal a 32.33% average level of fiscal transparency for Africa over the period 2006-2015. This is abysmal and corresponds to a **"**low level**"** of fiscal transparency characterisation on the Open Budget Index (OBI) scale (0-100%). The minimum score is 0 and the maximum score by any African country score is 92 with a standard deviation of 23.5%. This signifies a very high disparity amongst SSA countries in terms of fiscal transparency. Interestingly, most of the SSA countries (including Uganda, Senegal and Benin) that allow independent candidates are amongst those that score above the SSA's average of 32.5% in the 2017 OBI and perform better than most countries that do not

allow independent candidates in their electoral process: this is an important deduction that can be investigated further. Upon inspection of partisan 2, our summary statistics reveal a mean partisan fragmentation index of 0.446, a standard deviation of 0.572 and a maximum of 0.770. This measure reveals that although with a wide dispersion from the mean value, the mean value is close to 0.5 – an indication of a significant level of partisan fragmentation.

Table 6.2: Summary statistics

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
Ft	104	32.327	23.531	0	92
Civillaw	104	0.442	0.499	0	1
Partisan Fragmentation 1	104	0.955	0.572	0.23	4
Partisan Fragmentation 2	104	0.045	0.572	-3	0.77
Checks	100	2.480	1.235	0	5
Ethno-linguistic Fractionalisation	104	0.725	0.169	0.22	0.92
Military	97	0.551	0.567	0.08	2.71
Aidgdp	99	9.759	19.079	0.07	150
Natres	104	15.443	12.935	1.37	58
Growth	104	5.729	3.978	-9.09	19
Popngrowth	104	2.832	0.715	1.05	4.61
Urpopn	85	15.007	0.975	13.7	17.2

Source: Computed by the author.

With the Cruz *et al*. (2018) measure (partisan1), the average level of partisan fragmentations in SSA is 0.995. This suggests a very 'high level' of partisan fragmentation in Africa. With the Beck*et al*. measure of partisan fragmentation, the average level of partisan fragmentation in Africa is 0.045 and the maximum recorded by any African country is 0.77. Another important deduction from this stage of the analysis is that there is a significant level of revenue from natural resources as a percentage of GDP in Africa. This reflects that a large number of SSA countries differ from the mean value of partisanship fragmentation recorded in Africa. SSA has a 'very high' ethno-linguistic fractionalisation average level of 0.75, thus a high level of competitiveness for resources that is ripe for common pool problems since most times the constituency delineation is along semi-homogeneous ethnic groups. The SSA level of fractionalisation may not be surprising given the many ethno-linguistic groups that make up the continent.

The high level of ethno-linguistic fractionalisation in SSA connotes the presence of diverse groups with diverse policy expectations from the budget, increasing the earlier highlighted common pool problem on the budget. The average natural resources as a percentage of GDP in SSA is ~15%. This is not surprising as most African countries depend on revenues from the sale of natural

resources. This also can breed institutional vulnerabilities such as a *rentier system* that is characterised by corruption. The average growth rate for SSA is 5.73% whilst Africa's population grew at an average of 2.83% for the period covered by our analysis. The average GDP *per capita* is US$2,494.13 with a minimum value of US$182. This perhaps explains why most SSA countries are characterised as low-income or lower-middle income economies under the World Bank's classification.[28]

The pairwise correlation matrix for the variables employed in our empirical analysis presented in Table 6.3 serves as a pointer for causal relationships as well as the presence or absence of multicollinearity. However, correlation does not establish causality. As expected, natural resource revenue, ratio of military force to total labour force, and civil law exhibited a negative correlation with fiscal transparency. The negative correlation between fiscal transparency and other factors such as Aidgdp and Partisan2 are contrary to expectations. An ambivalent relationship is expected between fiscal transparency and growth as well as population growth. In line with expectations, most of our variables of interest except partisan1 and 2 do not show a very high pairwise correlation. The high correlation between partisan1 and partisan2 is not a source of concern as they will not both be employed in the same model nor will they be employed in the construction of any index. Therefore, there is no cause for concern of multicollinearity, owing to the fact that generally, the independent variables do not hold very high correlation values amongst one another.

[28] See https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.

Table 6.3: Correlation table of variables

	ft	Civillaw	Partisan1	Partisan2	Checks	Ethnofract	Military	Aidgdp	Natres	Growth	Popngrowth
ft	1.000										
Civillaw	-0.597*	1.000									
Partisan1	0.190	-0.280*	1.000								
Partisan2	-0.191	0.280*	-1.000*	1.000							
Checks	0.002	-0.182	-0.331*	0.330*	1.000						
Ethnofract	0.200*	-0.260*	0.192	-0.192	0.154	1.000					
Military	-0.091	-0.117	0.058	-0.058	-0.424*	-0.210*	1.000				
Aidgdp	-0.099	-0.088	-0.037	0.037	0.404*	0.122	-0.228*	1.000			
Natres	-0.406*	0.286*	-0.064	0.064	0.108	0.096	-0.045	0.255*	1.000		
Growth	-0.164	0.057	0.023	-0.023	0.053	-0.022	0.035	0.071	0.234*	1.000	
Popngrowth	-0.587*	0.493*	0.019	-0.019	0.042	0.018	-0.374*	0.261*	0.512*	0.131	1.000

Source: Author’s computation

Notes: ***, ** and * indicate significant at 1%, 5% and 10% level respectively.

6.5.2 Findings of the underlying political drivers of fiscal transparency

Our estimation results are presented in Table 6.4. Our analysis and reports are based on outputs derived from the dynamic panel data system GMM models (Equation 6.2). There are four regressions in the results table representing our regression estimates of the various political forces that influence fiscal transparency: Partisan fragmentation1(lpartisan1); Partisan fragmentation2(lpartisan2), Checks and Balances (lcheck), and Ethno-linguistic fractionalisation, (lethnofract). Because sometimes political factors can be somewhat correlated, employing these variables of interest individually in each model allows us to capture the near-exact impact (magnitude) of each variable on fiscal transparency, thus avoiding the likelihood of overlapping impact.

We hypothesised that both measures of partisan fragmentation as well as checks and balances have a positive and significant relationship with fiscal transparency. Hence, our expected or predicted signs for βs are expected to be positive and statistically significant for both measures of partisan fragmentation and for checks and balances and negative for Ethnofractionalisation.

From Table 6.4 the lag of our dependent variable Ft(t-1) in all the models is statistically significant and positively associated with cotemporaneous levels of fiscal transparency in Africa. More importantly, the absolute value of the autoregressive parameter is less than 1. This is a necessary condition for a dynamic panel data model to be considered stationary (Blundell and Bond, 1998). Our unadjusted measure of political competition, also known as partisan fragmentation (partisan1), exhibits a negative but statistically significant association with fiscal transparency in Africa. This relationship though significant at 5% does not conform to expectations. However, upon adjusting to account for independent candidates, partisan2 shows a positive and significant relationship. This implies that taking into consideration the presence of independent candidates, an increase in partisan fragmentation will lead to an improvement in the level of fiscal transparency. This finding is in line with *a priori* expectations and with the position argued by extant studies. For example Halleberg (2004) suggested that political competition is important for transparent fiscal institutions, and Rosendorff and Vreeland (2006) found a positive relationship between political competition and fiscal transparency. Also, worthy of note is the importance of independent candidates in the party fragmentation variable. This could mean that the more independent candidates there are in parliament, the better for fiscal transparency and overall good governance. Of course, the presence of independents could also mean a lot for the nature of the socio-political context and underlying structure. A multi-party system may not fully represent groups in an ethno-fragmented society. The ethnic groups with larger numbers can capture government agenda to the detriment of other groups. The presence of more independents serves to ensure that the other groups are not neglected in the governance processes.

Studies by Wehner and De Renzio (2013) on a global data set and von Hagen (2007) also revealed a positive relationship between partisan fragmentation and fiscal transparency. Alt and Lassen (2006) argued that political competition is important for the adoption of transparent fiscal institution given that the higher the level of political competition, the less similar the preferences of opposite parties, and consequently the higher the benefits of tying the hands of a political adversary by initiating fiscal transparency reforms. However, this can only be the case if there is frequent political turnover, then it will be in the interest of all the political parties to implement some form of transparency with the budget institutions with a view to reducing opportunistic behaviour of political opponents as well as the debt accumulation in political equilibrium. In essence parties will mostly cooperate on fiscal transparency when they are not sure of the ability or identity of future candidates and as far as both parties are sure that they both are equally likely to be in government in the near future (Alt and Lassen, 2006). Studies by Wehner and De Renzio (2013) on a global data set revealed a positive relationship between partisan fragmentation and fiscal transparency. An argument that can be made in this regard is that independent candidates, as the name implies, cannot be consumed by the "*toe the party line syndrome*". Rather, most times, when such independent candidates prevail in elections, it is often attributed to society's trust in their sense of independence, integrity and desire to seek a transparent and accountable government.

From our estimated results, contrary to *a priori* expectation, checks and balances showed a negative association with fiscal transparency albeit the relationship is not statistically significant. In the context of SSA, this result is not entirely surprising. A plausible explanation can be attributed to the *toeing the party line syndrome* where allegiance to the party trumps allegiance to parliament as an independent institution. This vitiates or diminishes the oversight function of the parliament as well as the public accountability role of the legislature, ultimately leading to a drop in the level of fiscal transparency. For instance, section 80, sub-sections (3&4) of Nigeria's constitution vests the powers over the Federal Government's purse on the Parliament. It provides that no expenditure on behalf of the Federal Government of Nigeria shall be carried out without the approval of the National Assembly (Nigeria's parliament). However, in 2018 the President paid for procurement for military war planes, though apparently in good faith, but before informing the parliaments as required by the country's constitution -a gross breech of constitutional provisions. Parliamentarians of the opposition party saw this as a constitutional misnomer and lack of regard for the parliament and as such wanted the president reprimanded. Nevertheless, the leadership of the country's parliament being of same party with the President and at the same time the ruling party, ignored the seeming affront on the independence of the legislature and towed the party line in safe-guarding the president from any

reprimand. Thus, ignoring the seeming constitutional breach and seeming disregard for the legislature, *Vanguard* (May 2nd, 2018)[29]

In line with expectations, ethno-fractionalisation (lEthnofract), sometimes loosely referred to as polarisation, has a negative relationship with fiscal transparency which is also highly statistically significant at 1%. Contrary findings were arrived at by Wehner and De Renzio (2013) and Andreula and Chong (2016). One of the early studies to point out the deleterious impact of a highly fractionalised society was Alesina *et al. (*2003), who argued that ethnic and linguistic fractionalisation are associated with negative outcomes in terms of the quality of government. Studies by Canning and Fay (1993) and Mauro (1995) shed light on the influence of ethnic fragmentation on government's activities as well as the quality of institutions. La Porta *et al*. (1999) was one of the earliest empirical studies to suggest that ethno-fractionalisation is important in government activities, although legal origin matters more.

We also controlled for some socio-economic and political economy factors. Most of our employed control variables have been used by the prevailing literature on determinants of fiscal transparency (see e.g. Tekeng and Sharaf, 2015; Wehner and De Renzio, 2013). From Table 6.4 the factors include natural resources revenue as a percentage of GDP (Natres), administrative heritage proxied by legal system (civil law dummy), military force as a percentage of total labour force; business disclosure index; GDP and population growths, and Aid as a percentage of GDP.

Table 6.4: Empirical results of the political drivers of fiscal transparency

Dependent variable: Natural log of fiscal transparency				
Explanatory Variables	Model (1)	Model (2)	Model (3)	Model (4)
Ft(t-1)	0.568***	0.271**	0.471***	0.501***
	(0.059)	(0.096)	(0.052)	(0.035)
lPartisan1	-0.474**			
	(0.212)			
lPartisan2		0.425*		
		(0.238)		
lChecks			-0.251	
			(0.393)	
lEthnofract				-2.962***
				(0.818)
Civillaw	-0.055	-0.448	0.479	-0.714
	(0.275)	(0.367)	(0.853)	(0.511)
Military	-0.078	1.343**	-0.421	-0.211**
	(0.070)	(0.534)	(0.293)	(0.088)

[29] See Nigerian Vanguard News Papers https://www.vanguardngr.com/2018/05/purchase-496m-tucano-aircraft-senate-gets-report-today-call-buharis-impeachment/. Accessed online as at : 15th February 2020.

Natres	-0.005	0.005	-0.003	-0.002
	(0.003)	(0.009)	(0.002)	(0.003)
Growth	-0.032*	-0.069	-0.032**	-0.038*
	(0.017)	(0.056)	(0.014)	(0.021)
Popngrowth	-0.313	-1.378**	-0.760	-0.006
	(0.375)	(0.571)	(0.548)	(0.568)
Aidgdp	0.018***	0.019**	0.022***	0.016**
	(0.005)	(0.007)	(0.004)	(0.006)
Constant	2.436**	7.089***	4.132***	1.393
	(0.951)	(1.443)	(1.295)	(1.490)
Diagnostics:				
Number of observations	71	37	65	71
Number of group	21	14	20	21
Country Fixed Effects Included	Yes	Yes	Yes	Yes
F-test	720.6***	439.2***	132.3***	159.7***
AR (1): (p-value)	0.185	0.525	0.310	0.264
AR (2): (p-value)	0.788	0.569	0.399	0.465
Hansen: (p-value)	0.996	0.999	0.986	0.990

Source: Author's computation

Notes: (a) *** p<0.01, ** p<0.05, * p<0.1 indicate 99%, 95% and 90% significance levels respectively.
(b) Standard errors are in parentheses.
(c) Variables in small letters are in log form and variables in capital letters are in levels.
(d) All estimations are undertaken in STATA 14.

In line with *a priori* expectations, Aid as a percentage of GDP (Aidgdp) has a positive and statistically significant relationship with fiscal transparency in the four models estimated. This also justifies our estimation technique, as the call by donors for an improvement in the level of transparency in the management of government finances emanates mostly from the high level of opacity evidenced by past fiscal transparency performance. This in essence transforms aid into an international political instrument, which if deployed properly can lead to improvements in fiscal transparency. As a precondition for receipt of foreign aid, Drummond (2011) pointed out the need for aid recipient countries to be more transparent with their national budgets (including revenues from their extractive industries). IBP's (2010) open budget survey discovered that in some cases, external pressure from donors forced aid recipient authorities to improve on their level of budget transparency. Reacting to this finding, IBP (2010) recommended the incentivisation of aid to recipient countries in ways that enhance budget transparency in recipient countries. Epstein (2011) also highlighted the importance of fiscal transparency and the need for adoption of languages demanding for enhanced fiscal transparency by aid recipient countries as it pertains to donor agencies and aid-recipient governments cooperation. The US State Department (2008) acknowledged that budget transparency and accountability are critical to sustainable development. Government opacity enables mismanagement and corruption, undermining development and hobbling economic growth. Foreign aid is now mostly tied to improvements in prevailing levels of fiscal transparency.

In consonance with *a priori* expectations regarding employing a civil law, our study revealed that civil law governments are preponderantly associated with a lower level of fiscal transparency in SSA. Wehner and De Renzio (2013) found a similar relationship to ours although their results were not statistically significant. Similarly, studies by Alt and Lassen (2006) revealed a positive correlation between common law legal origin and the measure of fiscal transparency in a set of 19 OECD countries. One of the critical political measures of repression impacting on demand for transparency is the *extent of militarisation* of the labour force. From our analysis, in line with our *a priori* expectation, the percentage of military personnel including paramilitary forces in the population of the country is negatively associated with fiscal transparency in all our four models and highly statistically significant in two of the models. Tekeng and Sharaf (2015) in their study on developing countries in Africa, Latin America and Asia, found similar results. In the context of developing countries, *heavily militarised* societies are characterised by larger military forces and expenditure and are most times associated with suppression of all forms of freedoms as well as oppression of the population by the protected government. Under such situations it is easier to experience a high level of fiscal opacity (less fiscal transparency). Such repressive tendencies could impede on the media as well as CSO's attempts to hold the authorities accountable with a view to achieving a better level of fiscal transparency and better fiscal outcomes.

Empirical findings from our study reveal that natural resources as a percentage of GDP in Africa have a negative relationship with fiscal transparency in most of our models, although none of these relationships in the models were statistically significant. This implies that the more an SSA country's revenue was from natural resources, the less the level of fiscal transparency it will exude. Similar findings were arrived at by earlier studies (e.g. Khagram *et al*., 2013; Egorov *et al*., 2009 which found a negative and significant association between oil income and fiscal transparency amongst autocratic states. Ross (2011) also found mineral wealth associated negatively with the level of fiscal transparency. Khagram *et al*. (2013) concluded that oil wealth increases the value of staying in power and hence causes dictators to reduce transparency, hiding their government's corruption and inefficiencies.

Unsurprisingly, some reports by the Extractive Industries Transparency Initiative (EITI) identified the unaccounted use of revenues and corruption as part of the problems with the oil mineral sector. Ross (2011) narrowed the cause of the relationship to the democracy–autocracy divide stressing that amongst democracies, a country's mineral wealth was found not to be related to the transparency of its financial management. However, amongst autocratic states, greater oil wealth was found to correlate with less fiscal transparency. This is analogous to Hossain and Chowdhury (1994) which argued that non-democratic regimes tend to maintain and legitimise their rule by buying the allegiance of political elites, hence contributing to the budget deficit.

Our empirical result yielded a negative association between population growth and fiscal transparency in all four of our models. We had hypothesised an ambivalent relationship that if SSA's growth in the last decade is knowledge-based and inclusive, it will lead to improved welfare and well-being. The public will be more educated and informed which will in turn empower the public to demand better accountability. The opposite will be the case if growth is mostly financed by commodities rather than knowledge driven. The latter could be the explanation for the African experience. Also, population growth puts pressure on resources and can result in budget deficits. Similarly, our growth variable in the empirical analysis revealed a negative relationship with fiscal transparency in all of our models, three of which were significant.

6.5.3 Post-estimation robustness checks

The post-estimation statistics presented alongside our results in Table 6.4 examined the models for the presence of serial correlation and for over-identification with a view to establishing the robustness of our models. To achieve this, we employed the Arellano and Bond and Sargan/Hansen tests for the presence of autocorrelation and over-identification respectively. According to Cameron and Trivedi (2009), dynamic panel data introduces the condition of no correlation in the error term. Arellano and Bond (1991) noted that to achieve unbiased estimations requires the absence of a second-order serial correlation of the error term. By design, the values for the error term could be serially correlated in the first order i.e. AR (1) could be statistically insignificant based on its p-values. However, and as an important rule, a second-order serial correlation will be a sign of misspecification. Hence, our expectation is that probability of $Ar(2)$ $(pr > z)$ will not be significant at 5%, validating the absence of serial autocorrelation in the errors (see Labra and Torrecillas, 2018) where z signifies the standard normal distribution. The results of the AR (2-order) test for serial correlation, which is applied to the residuals in differences[30], fails to reject the null hypothesis for a second order serial correlation in all the estimated models.

Similarly, from the Hansen –J statistics reported in Table 6.4, we fail to reject the null hypotheses[31] of the *Hansen* test for over-identification (i.e. the overall exogeneity of the instruments used in the GMM estimation) at the 5% level for all the estimated models. We test for validity of exclusion restrictions using the Hansen –J tests. This leads to our conclusion (acceptance of the null hypothesis) that our over-identification restrictions are also valid.

a. Null Hypothesis $(\boldsymbol{H_0})$ **–** All restrictions of over-identification are valid.

b. Alternative Hypothesis $(\boldsymbol{H_1})$ **–** All restrictions of over-identification are not valid.

[30] To check for first-order serial correlation in levels, second-order correlation in differences is checked because for GMM estimator, first-order serial correlation is expected *a priori* in the residuals in differences. Not surprisingly, the AR (1-order) serial correlation test results in most cases reject the null hypothesis of no serial correlation at the 5% level.

[31] The null hypothesis (H_0) for the Hansen test is that all our overidentification restrictions are valid. In other words, the null hypothesis has correct model specification and valid overidentifying restrictions.

Acceptance or rejection criteria

$$Prob > x^2 \geq 0.05\ (5\%)$$

If our obtained probability value (p-value) is ≥ 0.05, the instruments we employed are valid. Hence, overidentification does not exist – there is no evidence to reject the null hypothesis (Baum, 2006) and it indicates that the instruments are valid and the results of our GMM estimation are reliable.

We reported the two-step robust standard errors corrected for finite sample following Windmeijer (2005). Our results satisfy the key assumptions of system GMM estimations by Arellano and Bond (1991) and Windmeijer (2005). As such, our models can be described as appropriate models with which to situate a discussion on the political determinants of fiscal transparency in SSA. Our empirical results confirm the influence of some internal and external political factors on determining the level of fiscal transparency in Africa.

6.6 Concluding remarks and policy recommendations

The main objective of this paper was to empirically examine the relationship between political factors and fiscal transparency in the context of SSA. The theoretical literature review and framework contextualised the budget process as a contract (delegation of duties) between the principals (the electorate) and the agents (elected officials). An improvement in the level of fiscal transparency will increase the level of information available to both parties and consequently reduce the extent of information asymmetry, especially on the part of the principals (the electorate). This will consequently strengthen their public accountability demand within the retrospective voter's paradigm. Such improvement in the public accountability process due to a reduction in information asymmetry could aid the writing of a better contract.

By and large, our empirical findings confirm that internally, political forces such as partisanship and ethnic fractionalisation play a role in determining the level of fiscal transparency in SSA. Our results further indicate the failure of the most important political instrument (checks and balances) in contributing to better public accountability in SSA. Importantly, our results indicate that factoring in independent candidates, partisan fragmentation leads to an enhanced level of fiscal disclosure in SSA. Externally, our result confirms the crucial role played by external political factors such as the preconditions of improvements in fiscal transparency attached to Africa's receipt of foreign aid. For about a decade foreign aid, came with conditions of improved fiscal transparency as a matter of policy, and this contributed significantly to improvements in fiscal transparency in SSA. The results show that *over militarisation* of the labour force, an indicator of repression is negatively associated with fiscal transparency. These results, although the first exclusively on SSA countries, lend weight to findings by prior studies that concluded that political forces are influential to fiscal transparency.

Three key policy implications can be drawn from the study. First, in addition to creating more space for multiparty politics, more SSA countries should consider institutionalising a role for independent candidates in the electoral process. This offers the principals (the electorate) a gamut of choices as regards the best choice of candidates that will be more transparent in the management of public finances. As evidenced by our empirical analysis, when independent candidates are considered, partisan fragmentation holds a significant and positive relationship with fiscal transparency in SSA. This can be attributed to the fact that independent candidates do not get consumed by the *toe the party line* syndrome that helps to perpetrate the opacity in the management of public finances. Also, the fear of the *unknown extent* of reforms independent candidates may want to carry out will force the hands of the government parties to carry out fiscal transparency reforms themselves so as to take the credit and manage the process.

Secondly, there is a need for capacity building for both the legislature and executive arms of government. They are the critical agent for checks and balances and hence public accountability. Evidently contrary to expectations, our measure of checks and balances (Legislative-Executive competitiveness) revealed a negative relationship with fiscal transparency. Toeing the party line does not mean surrendering the independence of an independent arm of government, the legislature to the executive and vice versa. The opportunity cost of such loss of independence, which is the real cost, is an increase in fiscal opacity (less fiscal transparency). This has dire implications for the management of the entire economy including fiscal discipline.

Lastly, international donor agencies and superpowers should stick to their current policy of improvement in fiscal transparency and political reforms as preconditions for aid of any form.

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CHAPTER 7
THE ECONOMIC DETERMINANTS OF FISCAL TRANSPARENCY: EVIDENCE FROM SUB-SAHARAN AFRICA (SSA)

7.1 Introduction

From existing studies on the possible drivers of fiscal transparency, three discernable groups of factors influencing fiscal transparency can be identified: the institutional, the political and the economic (Wehner and De Renzio, 2013; Tekeng and Sharaf, 2015; Andreula and Chong 2016). In the wake of the various regional and global financial crises, the need to reassess global efforts to promote fiscal transparency increased for two reasons. First, the crisis revealed that, even amongst developed economies, governments' understanding of the existing fiscal position was inadequate, as shown by the emergence of previously unrecorded deficits and debts. This connotes a poor level of fiscal transparency which IMF (2012, p. 4) referred to as "the clarity, reliability, frequency, timeliness, and relevance of public fiscal reporting and the openness to the public of the government's fiscal policy-making process". The case could be worse for SSA countries which are characterised by weak budget procedures and inadequate budget institutions (Lledo and Poplawski-Ribeiro, 2013). Secondly, the crisis demonstrated that, in many cases, countries had substantially underestimated the risks to their fiscal prospects, especially those emanating from the financial sector. Cross-country studies (including Glennerster and Shin, 2008; Hameed, 2005) suggest that fiscal transparency is associated with better sovereign bond ratings and greater access to international capital markets.

Against the foregoing backdrop, this chapter focuses on establishing the third group of factors, the economic forces influencing the level of fiscal transparency in SSA. The rest of the chapter is structured thus: first is the background to fiscal transparency in SSA, followed by a review of relevant extant literature. Next is a detailed discussion of our empirical method, strategy and estimation technique, followed by presentation and discussion of our empirical results. The final section is the conclusion and policy recommendations.

7.2 Background

Very little has been written on the causes of SSA's poor fiscal policy outcomes or its recorded poor levels of fiscal transparency. Studies such as Alesina and Perotti (1996), Alt and Lassen (2006a) and Milesi-Ferretti (2004) have all espoused the importance of fiscal transparency towards achieving desired fiscal outcome. In buttressing this point, Elslava (2010) highlighted the significance of fiscal transparency as necessary for achieving better fiscal outcomes. Eslava emphasised that the

absence of good levels of fiscal transparency will lead to larger fiscal deficits. Shi and Svenson (2006) made similar arguments for enhanced fiscal transparency. They argued that wherever it is possible for voters to observe all government programmes whilst also being oblivious of the prevailing fiscal balance, this could lead to an increase in opportunistic fiscal deficits. This connotes a fiscal environment of less transparency.

Various definitions of the concept of fiscal transparency have been provided. The OECD (2002, p. 7) defined fiscal transparency as "the full disclosure of all relevant fiscal information in a timely and systematic manner". An earlier but somewhat nebulous definition was offered by Premchand (1993) which defined budget transparency as the public availability of information regarding government decision-making procedures and transactions. This last definition lacked key elements such as timeliness, accessibility and international comparability. Nevertheless, the most comprehensive definition of fiscal transparency remains that offered by Kopits and Craig (1998, p. 1), who defined fiscal transparency as "openness toward the public at large about government structure and functions, fiscal policy intentions, public sector accounts, and projections. It involves ready access to reliable, comprehensive, timely, understandable, and internationally comparable information on government activities—whether undertaken inside or outside the government sector—so that the electorate and financial markets can accurately assess the government's financial position and the true costs and benefits".

As highlighted by Gollwitzer (2010), one of the ambitions of African countries is to metamorphose into a common market, with the possibility of transforming into an economic union in the future. This entails the easing of restrictions on cross-border capital flows as well as movement of labour. As such, an exclusively SSA analysis such as ours will be beneficial in a number of ways. First, it will help to identify the economic forces influencing fiscal transparency. Fiscal transparency reduces fiscal deficits and thus enables countries aspiring to join a regional economic arrangement to fulfil the convergence criterion which is essentially a regional requirement for fiscal discipline. Therefore, at a regional level, this study will aid understanding the economic factors influencing fiscal transparency, with a view to drawing policy recommendations that can improve fiscal transparency and ultimately contributing to achieving regional fiscal convergence criteria. Also, our study could provide a basis for continent-wide reform of public financial management.

In their efforts to achieve fiscal discipline SSA economies adopted one form of fiscal rule or another. Most of these fiscal rules were supranational with convergence criteria that were adopted by member countries of the various sub-regional economic areas. For instance, the eight-member West African Economic and Monetary Union (WAEMU) adopted a convergence criterion (fiscal rule) of deficit not exceeding 3% of GDP and the nominal debt-to-GDP ratio was kept at 70% of GDP. However, over the years, empirical evidence such as IMF (2015, 2016, 2017 and 2018) revealed that most African

countries were still recording persistent and unsustainable deficits and debt thresholds over and above the adopted national or supranational convergence criteria that constitute their fiscal rules.[32]

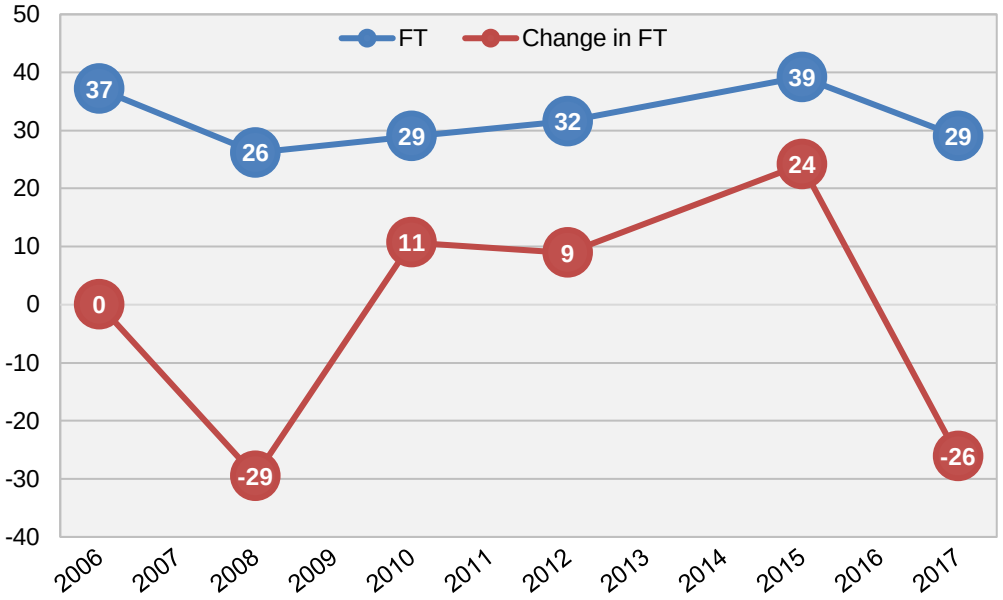
Alesina and Perotti (1996) and Alt and Lassen (2006a) highlighted the need for fiscal rules to be accompanied by fiscal transparency as a necessary condition, if fiscal rules are to yield the desired result. Focusing on Latin America, Alesina *et al.* (1999) found that rules that guarantee transparency and comprehensiveness of the budget process helped to achieve fiscal discipline more than other good budget practices, for instance centralisation. Dabla-Norris *et al.* (2010) recorded similar findings for a group of low-income countries. In the same vein, at the supranational level, Milesi-Ferretti (2004) argued the effects of the Maastricht Treaty on European Union member countries on the fiscal transparency–fiscal outcomes nexus, positing that fiscal transparency assists in shaping fiscal performance, given that a very transparent fiscal context allows politicians to implement the requisite practices needed to balance the budget. Thus, a study in the context of SSA could go a long way in helping to identify some of the economic reasons why fiscal transparency levels have been poor in SSA and provide some of the requisite insights into why fiscal outcome has also been poor in SSA.

Contrary to expectations, very few studies have explored the economic factors driving fiscal transparency, especially in the context of SSA given that most African countries have experienced poor fiscal performance over time. Gollwitzer (2010) admitted that very little has been written on Africa's fiscal policy performance as there was limited information (minimal transparency) available on fiscal policies and procedures in Africa. One of the key features of a poorly managed budget process with its attendant negative impact on budget outcome is the level of opacity surrounding the budget process. This also has impact on service delivery. The World Bank (2003) as cited in Rajkumar and Swaroop (2008, p.2), identified "poor budget management as one of the main reasons why governments in developing countries finds it difficult to translate public spending into effective service".

Two clear deductions can be drawn from Figure 7.1. First, there have been fluctuations in the level of fiscal transparency in Africa. Secondly, it is obvious that on average, SSA has generally experienced an unimpressive performance in terms of fiscal transparency – it has never performed better than providing minimal information (21-40%) on how public finances are being managed.

[32] IMF (2017) Fiscal Rules at a Glance. The supranational fiscal rule (i.e. convergence criteria) for the East Africa Monetary Union (EAMU) includes a 50% ceiling on NPV of gross public debt and a 3% of GDP budget balance rule. For the Central African Economic and Monetary Community (CEMAC), the fiscal rule (i.e. convergence criteria) is that net public debt should be kept below 70%, and the basic structural fiscal balance as a percentage of nominal GDP should be in balance or surplus. WAEMU countries are Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo.

Figure 7.1: SSA average fiscal transparency performance (%) 2006-2017



Source: International Budget Partnership's Open Budget Index 2006-2017

In the 2006 Open Budget Survey, SSA recorded an average of 37% on the OBI fiscal transparency scale. There was a 29% decrease to -26.2% level of fiscal transparency as at the 2008 Open Budget Survey. Whilst there where modest improvements in the level of fiscal transparency in SSA for the 2010, 2012 and 2015 open budget surveys, there was a sharp increase in fiscal opacity (decrease in fiscal transparency) between 2015 and 2017. What then are the economic and socioeconomic factors influencing these variations in the level of fiscal transparency in the context of SSA?

7.3 Theoretical underpinning

SSA's efforts at achieving greater fiscal discipline is also tied to its quest for greater economic integration. In their efforts to overcome fiscal indiscipline, most SSA economies adopted one form of fiscal rule or another. Most of these fiscal rules were supranational with convergence criteria that were adopted by member countries of the various sub-regional economic areas. Why do most African countries pose fiscal deficits that are higher than their fiscal convergence criteria? This has been mostly associated with political economy hypothesis particularly, the role macroeconomic populism as well as other political theoretical constructs such as the common pool problem. Dornbusch and Edwards (1990) as cited in Hossain and Chowdhury (1998) described macroeconomic populism as a situation where a populist government undertakes ambitious programmes and gives priority to distributive objectives. Hence, it can be argued that the macroeconomics of deficits is cannot be divorced from the state of national politics. In climes where the politicians are rarely held accountable for the consequences of their policy decisions, the tendency to get away with fiscal policy wastefulness without worrying about the welfare of the

citizenry increases. The common pool problem of public finance arises when politicians' (or parties') support increases in targeted government spending that provide their constituencies with more public services for which they are responsible for barely a fraction of the total cost given that the spending is financed by general taxation. This ultimately results in a spending and deficit bias (Velasco, 2000; von Hagen, 2007).

It is pertinent to point out that such situations are associated with a less transparent budget process. The common pool problem is at the heart of some of the externalities in managing public finances. Common pool problems mostly emanate from heterogeneous interests across groups of voters and have been identified as possible reason for pervasive deficits. As cited elsewhere, Eslava (2010) highlighted that fiscal deficits emanates from three sources of conflicts of interest namely: "preference heterogeneity between policymakers and voters (i.e. *principal-agent* relationship); heterogeneity of fiscal preferences across politicians (i.e. partisanship); or heterogeneity of fiscal preferences across social groups or regions" Eslava (2010, p. 646). It is pertinent to point out that whilst most African countries have tried setting numerical fiscal limits, very little has been achieved in terms of better fiscal outcome and fiscal transparency.

7.4 Review of relevant literature

The literature on the economic drivers of fiscal transparency is still at an embryonic stage. Few studies have examined the relationship between economic factors and fiscal transparency, especially in the context of SSA. Allen (2001) classified the different forces driving fiscal transparency, suggesting that the significant differences in the political systems, government structures and economic and social objectives impact on financial reporting. Similarly, Montesinos (2001) buttressed this point by relating government financial reporting to political, social and economic factors. Thus, it becomes increasingly important for economic forces to be taken into consideration when investigating the determinants of fiscal transparency.

Khagram *et al.* (2013) listed four "causal triggers" whose complex interaction advance or impede fiscal transparency. These triggers are: political transitions, fiscal and economic crises, political and corruption scandals, and external influences. Whereas most prior studies such as Wehner and De Renzio (2013), Andreula *et al.* (2009), Andreula and Chong (2016) and De Simon *et al.* (2017) have mostly focused on political and institutional factors including corruption, very little attention has been paid to economic factors. As argued by Von Hagen and Harden (1995) and reinforced by Benito and Bastida (2009, p. 405) "institutional rules governing the budget process (among them, a large degree of transparency) affect fiscal performance in 12 EU countries". Benito and Bastida argued that to achieve satisfactory fiscal performance, it is essential to have adequate instruments such as fiscal transparency and accountability to rely on. Rogoff (1990) had earlier argued that elements such as

transparency and accountability are crucial not only for the tasks carried out by competent authorities, but also aid in reducing the incentives for fiscal irresponsibility, consequently controlling budget deficits. Thus, higher debt and deficits to GDP ratios serve as indicators of the level of control the government has over the economy. Comparing budget institutions amongst OECD countries, Tanzi (1994) revealed the differences in the levels of transparency amongst the OECD countries. The study also revealed that lack of transparency hinders control of expenditure.

Some of the earliest studies that suggest a nexus between central government's fiscal situation and budget transparency include Alesina and Perotti (1996), Von Hagen and Vabo (2005) and Stein *et al*. (1998). Findings from Alt and Lassen's (2006a) empirical study of OECD countries revealed a negative association between deficits as well as debt levels and fiscal transparency. Alt *et al*.'s (2006) study of US states concluded that in addition to political competition, past (historical) fiscal conditions of the state, especially debts and budget imbalances, seem to influence the level of fiscal transparency. A similar finding was recorded by Stein *et al*. (1998) and Marcel and Tokman (2002) for Chile. More recently, the literature on the determinants of fiscal transparency was narrowed down by Tekeng and Sharaf (2015) and Wehner and De Renzio (2013) to investigate the role of economic forces in influencing fiscal transparency. The economic factors considered include trade openness, capital account openness, natural resource revenue inflow (as a percentage of GDP), aid (as a percentage of GDP), literacy level, administrative heritage, budget surplus/deficit, and debt, amongst others.

In a study of 27 developing countries, Tekeng and Sharaf (2015) revealed a positive relationship between literacy level and fiscal transparency. Their study also revealed a similar positive relationship between the quality of institutions (proxied by regulatory quality) and fiscal transparency. Their study revealed that the level of natural resources and the openness of capital account have a negative relationship with fiscal transparency. Tekeng and Sharaf (2015) extended the literature on fiscal transparency, being the first study to consider the impact of economic and socioeconomic forces such as *de jure* trade openness, capital account openness and literacy level on fiscal transparency. The literature on the influence of foreign aid on fiscal transparency is gaining traction as an important driver of fiscal transparency. For over a decade, most international donor agencies and countries have adopted as a policy the requirement of improvements in the level of fiscal transparency by recipient countries as a precondition for development assistance (Drummond, 2011; IBP, 2010 and 2013; Epstein, 2011). However, no identifiable prior empirical reports in the last decade have investigated the relationship between aid and the level of fiscal transparency especially in the context of SSA.

The general conjecture is that there is a link between budget systems, the levels of transparency therefrom and the general administrative machinery of any country. La Porta *et al*. (1999) stated that the interventionist legal traditions based on the practice of civil law begets lesser government

performance on a range of indicators, including corruption, than those based on the British common law tradition. In a study of 19 OECD countries, Alt and Lassen (2006b) showed a positive correlation between common law legal origin and their measure of fiscal transparency. Wehner and De Renzio (2013) revealed a negative and statistically insignificant relationship between civil law as a measure of administrative heritage and fiscal transparency.

7.5 Methodology

7.5.1 Estimation of the economic forces influencing fiscal transparency in SSA

This section provides an in-depth outline of the estimation procedure employed in estimating our econometric model of the economic factors influencing variations in fiscal transparency in Africa. Our empirical study covers the period 2006-2015 within the framework of a panel data analysis. Hsiao (2007) accentuated the advantages of panel data econometric analysis, pointing out that it augments the variability of the data and hence enables us to gain more degrees of freedom. This grants us more sample variability than would be the case if cross-sectional data analysis were employed. As emphasised by Wooldridge (2010), estimates from cross-sectional regression analysis could be biased owing to risks originating from omitted-variable bias. Employing panel data analysis will permit the control of unobserved time constant variables, thus solving the problem. Another key advantage of panel analysis is that it provides for a time variation, within-country standard deviation, as well as country variation, between-country standard deviation (Agbloyor *et al*., 2016). Hence, for this study, the nexus between economic factors and fiscal transparency in SSA will be tested employing the following panel data model:

$$FT_{it} = \beta' x_{it} + \varepsilon_{it}\ i = 1, \dots \dots . . N; \dots \dots \dots \dots , T \tag{7.1}$$

Where FT_{it} denotes fiscal transparency measured in percentage for country i at time t, x_{it} signifies a set of time varying as well as time invariant covariates, β' stands for the related vectors of parameters we intend to estimate. ε_{it} is our composite error term. It is represented as $\varepsilon_{it} = \gamma_i + \epsilon_{it}$, where γ_i stands for the unobserved country-specific effect and ϵ_{it}, is the idiosyncratic error term. Our determinant variables comprise Trade Openness, *de facto* (actual) Capital Account Openness; *de jure* (formal) Capital Account Openness, Overall Balance, Debt Service, Natural Resource Revenue as a percentage of GDP, Civil law, Military personnel as a percentage of total labour force, Growth, Population Growth, Aid as a percentage of GDP, and inflation. It is pertinent to point out that we employed the both the *de facto* and the *de jure* measures of capital account openness but in different models with a view to capturing both the influence emanating from the formal-political (*de jure*) as well as that emanating from the actual (*de facto*) financial liberalisation in view of the diverse facets of the ongoing process of financial globalisation.

A new dimension in the fiscal transparency literature is the role of openness to trade as well as openness to movement of capital as drivers of fiscal transparency. Tekeng and Sharaf (2015), argued that capital mobility as well as trade openness enhances fiscal effectiveness as it reduces budget deficits. They opined that "countries that are not naturally open are more corrupt because of available rents; while openness, as a policy, leads to less corruption, to potentially sounder budget systems and to more efficient fiscal administrations" (Tekeng and Sharaf, 2015, p. 81). This tries to establish a connection between a country's level of openness and its level of fiscal transparency. Tekeng and Sharaf argued that international trade openness and capital movements enhance fiscal transparency as they reduce the costs and increase the benefits of fiscal transparency given that trade openness leads to increased competition and economic growth, whilst mobility of international capital fosters efficient economic environments. Both aspects of openness (trade and capital account openness) are considered.

Pursuant to our aim of capturing the diverse facets of the ongoing process of financial globalisation, unlike Tekeng and Sharaf (2015) that employed only the Chinn-Ito (2008) index, *de jure* (formal-political) measure of capital account openness, we went further to test the *de facto* (actual) measure of capital account openness. Our decision not to choose any measure over the other is buttressed by Gehringer (2013) submission that a formal economy may not necessarily be practically so and vice versa. More so, employing both measures but in different models, will avail us the opportunity to measure the disparity in the degree of association between both measures and fiscal transparency. This is important given the varied measures of financial globalization Gehringer (2013).

Tekeng and Sharaf (2015) hypothesise a positive nexus between trade openness and fiscal transparency and use the Ordinary Least Square (OLS) and the Two Stage Least Squares (2SLS) for the estimation. Their findings were ambiguous. Whilst their OLS model revealed a negative relationship between openness to international trade and fiscal transparency, their 2SLS estimations revealed a positive and significant relationship. Results from Tekeng and Sharaf's (2015)study revealed a negative association between capital account openness and fiscal transparency. It is interesting to point out that one of the most important economic factors influencing fiscal transparency is Debt Service. This nexus is yet to receive any attention in the literature of fiscal transparency. Debt service is usually a first line charge on revenue. First line charges on revenue are charges which are netted out before arriving at discretionary revenue (Fölscher, 2002). They have the potential of a negative impact on government's discretionary expenditure if they increase, limiting government's expenditure on critical infrastructures and services, thus triggering calls for more transparency on the management of government resources. Debt-service cost is determined by applying the interest rate to the government stock of debt and assets (Shah, 2007). As government deficits and the attendant debt levels increase, the cost of servicing such debts (debt

service) also increases. Being a first line charge on revenue, this consequently leads to a dip in government net revenue and accordingly government ability to service other critical expenditure items such as infrastructure, education, defence and overall security. Such key infrastructure and service deficit normally see the citizens demanding enhanced transparency in the management of public finances, therefore we hypothesis a positive nexus between debt service and fiscal transparency.

Andreula and Chong (2016), instrumenting inflation and external debt, revealed a positive and significant relationship between inflation and the index of fiscal transparency. Generally, a spike in inflation often leads to anxiety on the efficient management of the economy as a whole. High levels of inflation also affect government expenditure that accentuates government borrowing and government deficits. Thus, we include an inflation variable in one of the models. Other socioeconomic control variables were considered and their hypothesised relationship with fiscal transparency proffered. We expect aid as a percentage of GDP, business disclosure (Business) and population growth to have a positive association with fiscal transparency. Conversely, we anticipate a negative relationship between fiscal transparency and proportion of military force to the overall labour force, revenue derived from natural resources (as a percentage of GDP) as well as with administrative heritage proxied by (Civil law). The relationship between growth and fiscal transparency is ambivalent. Hence, the directions of influence of the identified socioeconomic factors on fiscal transparency may differ: whilst some are expected to have a positive relationship with fiscal transparency, others are expected to exhibit a negative relationship or, in some cases, an ambivalent relationship.

Wehner and De Renzio (2013) show that natural resource wealth has consistently been negatively related to fiscal transparency. Similar findings were arrived at by Tekeng and Sharaf (2015). This may be attributed to the rentier state nature of such economies and their attendant predisposition to corruption. Studies such as De Simone (2017) revealed a negative correlation between corruption and fiscal transparency. The high-level opacity surrounding the contracting process of extraction of natural resources may serve a contributing factor

An evolving argument advanced by Tekeng and Sharaf (2015) in the literature on fiscal transparency is that private business disclosure is positively related to overall government disclosure. They argue that subjecting private firms to high demands for transparency, especially when servicing government contracts, could lead to an improvement in government transparency. The degree of *militarisation* of a country measured by the percentage of military force to total labour force in a country can impact negatively on the level of fiscal transparency (Tekeng and Sharaf, 2015). They also contend that *over militarisation* could be connected with high-handed and opaque government expenditure on military equipment. The variable measuring the percentage of military personnel out of the total labour force of the country is drawn from WDI (2016). This is aimed at investigating the

measure of influence held by political regimes or administrations at the expense of freedom of expression. In the context of developing countries, maintaining larger armed forces have been linked with less transparent and oppressive regimes. In such climes or regimes, civil society's efforts to hold governments accountable are mostly restricted.

Over time, the influence of administrative heritage on fiscal transparency has come under scrutiny. A seminal study by La Porta *et al*. (1999) argued that countries operating the common law system (mostly with a history of British rule) are more market-oriented and less government-oriented than civil law countries. It concluded that the greater protection of private property against the state, which is typical of common law systems, enhances several aspects of government performance including governance. In this study, our selected dummy variable measure of administrative heritage is civil law rooted in the French legal system. We anticipate a negative association between civil law and fiscal transparency in our model. Employing civil law as a measure of administrative heritage, a study by Wehner and De Renzio (2013) revealed a negative relationship between civil law and fiscal transparency as is expected although the relationship is not statistically significant.

The relationship between population growth and fiscal transparency has not been explored in previous studies. We hypothesise that population growth should have a positive relationship with fiscal transparency. It is anticipated that an increase in population across SSA countries will increase the pressure for judicious and transparent use of resources. It is also possible that an increase in population could put more pressure on government spending, hence could contribute to deficits. Published prior fiscal deficits could lead to a demand for greater fiscal transparency by the citizenry (Alt *et al*., 2006). On the other hand, it is anticipated that economic growth will yield an ambivalent relationship with fiscal transparency. Under an inclusive growth scenario, growth will yield an improvement in general well-being as well as an increase in income and standard of living of the citizenry as they will become more knowledgeable and informed of their rights. Having had more access to information, they will be able to seek more transparency in the use of public funds. This may not necessarily be the case in a non-inclusive growth. Thus, the net impact could be ambiguous.

In summary, we posit that openness (international trade and capital), debt service, inflation and business disclosure will have a positive influence on fiscal transparency. We hypothesise a negative relationship between natural resource revenue and fiscal transparency. A similar negative relationship is hypothesised between fiscal transparency and civil law. Thus, our predicted signs for βs are expected to be positive and statistically significant for measures of trade and capital account openness, debt service and inflation, whilst our predicted signs for βs are expected to be negative for natural resource revenue, overall balance and civil law.

In Equation 7.1 it is assumed that fiscal transparency responds to changes in the covariates instantly. A major concern is that in reality, it is also possible for our covariates to affect fiscal transparency with some lags. Theoretically, previous levels of fiscal transparency could possibly influence

subsequent fiscal transparency levels. De Renzio (2011) rightly argues that contemporary levels of fiscal transparency do influence future transparency levels given that part of the major preconditions by donor countries for future aid is an improvement in recipient countries' levels of budget transparency. This argument is further strengthened by the role of CSOs, who advocate for improvements in the level of fiscal transparency against the backdrop of the abysmal level of fiscal transparency in Africa. Consequently, we consider a dynamic model given its provision for partial adjustments in this order:

$$FT_{it} = \beta_{ft} FT_{i\,t-1} + \beta' x_{it} + \varepsilon_{it} \tag{7.2}$$

In Equation 6.2, $FT_{i\,t-1}$ represents the lagged dependent variable, and β_{ft} represents the measure of adjustment, which is expected not to be greater than one (1). All our explanatory variables as previously defined are contained in x_{it}. Equations 6.1 and 6.2 represent fiscal transparency models in their static and dynamic forms respectively. However, a static panel model may be disposed to limitations such as endogeneity, unobserved heterogeneity and cross-sectional dependence challenges. Whilst the unobserved heterogeneity effect can be treated using the fixed effect (FE) estimator by treating the unobserved effects as time invariant, the random effect (RE) estimator is employed whenever statistical evidence suggests that the unobserved heterogeneity is a random variable and is not correlated with the covariates (x_{it}).[33]

Our unobserved time-invariant heterogeneity issues as well as the endogeneity issues can be addressed using the Instrumental Variables (IV) estimator that is based on FE. However, results from both the FE and IV could also be biased owing to the presence of a cross-sectional relationship. Although SSA is made up of independent nation states, there exists the possibility of identical responses from countries to common shocks. This implies that some of the economic and socio-economic factors considered in the model could be correlated with fiscal transparency.

In addition to the earlier identified challenges, our dynamic panel model (Equation 7.2) is also disposed to some econometric challenges, such as correlation between the lagged dependent variable and the error term; more specifically with regard to the unobserved country-specific heterogeneity γ_i which further complicates the earlier mentioned challenges. Given that FT_{it} is also a function of γ_i, which is time invariant, our inclusion of $FT_{i\,t-1}$ as one of the regressors in Equation 7.2 could correlate with γ_i, and hence with ε_{it}. The presence of the lagged dependent variables $FT_{i\,t-1}$ as one of the regressors in the model could also lead to autocorrelation problems in the model. Roodman (2009) argues that given such situations, employing the OLS technique will yield biased and inconsistent estimates. Hence, it will be more appropriate to adopt the generalised

[33] The choice between (FE) and (RE) estimators is determined by carrying out the Hausman test with a null hypothesis (H_o): unobserved heterogeneity (ω_i) are not correlated with the covariates (x_{it}). Under the null Hypothesis (H_0), the (RE) is consistent and efficient. Regardless of whether or not Ho is true, the (FE) estimator is always consistent, the random effect is best if H_o is true as in the Best Linear Unbiased Estimator (BLUE).

method of moment (GMM) technique over the FE and IV estimators. Bond (2002) strongly highlighted that GMM panel data estimator allows for the consideration of the dynamic process, hence it is very important for recovering consistent estimates of the parameters of interest.

In our efforts to prevent results that are potentially biased in our empirical analysis, we employed the Arellano and Bond (1991) GMM estimator as it controls for the unobserved country heterogeneity (country-fixed effect), endogeneity (bi-directionality) of the explanatory variables, and the lagged dependent variable, in estimating our dynamic model. More crucially, the dynamic panel GMM methodology allows us the latitude to treat fiscal transparency as a dynamic process as well as addressing such issues of bi-directionality. Our estimations of the empirical relationships in this model are based on the SGMM given its proven efficiency. Employing the SGMM allows additional instruments to be obtained from the system of two equations (a differenced and a level equation) as the addition of the second equation yields more instruments. The SGMM is suitable for our study as it is designed for scenarios with short time periods and many countries (Roodman, 2006). This evidently fits our dataset given our short time period of five years and the large number of SSA countries (23 countries). A key weakness of the difference GMM estimator and thus of estimates therefrom emanates from its use of lagged levels of the explanatory variables as instruments for the regression equation in differences, especially when the explanatory variables are persistent over time. Also, as a cardinal rule with the system GMM technique, we kept the number of instruments less than the number of groups.

The two-step estimator which has the Windmeijer (2005) corrected standard errors was employed in our empirical analysis because it is asymptotically more efficient than the one-step estimator. Given that we have a panel with gaps, we maximise our sample size using the orthogonal deviations. Finally, to check for the consistency of our estimates, we employed two specifications tests: the Arellano and Bond Sargan test for second-order serial correlation in the error term (i.e. AR test) and the Hansen test of over-identification restrictions, which measures the validity of the instruments by analysing sample analogues of the moment conditions used in the estimation. Our error term by design could be serially correlated in the first order. However, having second-order serial correlation will be a misspecification; hence the AR (2) must not be significant.

Given the small sample in this study (unbalanced of 3-5 years) for just 23 countries, the unit root test was not conducted. This is buttressed by Hurlin and Mignon's (2007) position that when faced with small sample sizes, unit root tests have low power in trying to distinguish stationary series that are persistent from non-stationary series. Hurlin and Mignon argued that to increase the power of such unit root tests, will entail increasing the number of observations. Given the scope of our study (i.e. SSA countries) and a maximum period of five OBI published cycles (5 time periods), it is not practicable for us to increase either the number of countries or the time dimension.

7.6 Empirical results and discussion

7.6.1 Summary statistics

This section contains a presentation and discussion of results from our empirical analysis. Table 6.1 below is a presentation of our descriptive statistics. From our summary statistics in Table 6.1, it can be seen that the average level of fiscal transparency for the period 2006-2015 is 32.33%. This represents a less than impressive performance as it corresponds to a “low level” of fiscal transparency characterisation on the Open Budget Index (OBI) scale (0-100%). Whilst the highest score by an African country is 92%, some African countries score an abysmal 0%. The standard deviation is 23.5%. This indicates a very high range of dispersion amongst SSA countries in terms of fiscal transparency. Unsurprisingly, natural resources revenue as a percentage of GDP recorded an average of over 15% in SSA. Most African states depend on revenues from natural resources. The average growth rate of SSA countries is 5.73% whilst Africa’s population grew at an average of 2.83% for the period 2006-2015. The average inflation rate amongst SSA countries for the period under consideration is 8%, with a maximum of 37% inflation and a standard deviation from the mean of 6%. This is a significantly high rate of inflation that could easily call for scrutiny on general macroeconomic management. The average levels of international trade and financial openness Kaopen2 stand at about 71.9% and 113% respectively. This signifies a very significant level of trade and financial openness.

7.6.2 Correlation matrix

Table 6.2 presents our pairwise correlation matrix for the variables employed in our empirical analysis. Correlation results mostly serve as a pointer of causal relationships although they do not establish causation. In terms of signs, upon examination some interesting observations can be deduced from our correlation matrix. Our correlation table shows a negative relationship between fiscal transparency and natural resource revenue, civil law, military force ratio to total labour force, trade openness, aid, economic growth, population growth, overall balance and debt service. Of these, only natural resources revenue, civil law and military force ratio to labour force have the expected negative correlation.

On the other hand, as expected, our correlation matrix reveals a positive relationship between fiscal transparency and capital account openness as well as with business disclosure. Both natural resources revenue and capital account openness have the expected signs, are significant at 10% and in terms of magnitude have a sizeable relationship with fiscal transparency. As natural resource revenue in Africa increases, fiscal transparency reduces. This is not surprising as natural resource-rich African countries have exhibited a poor level of fiscal transparency over the years as evidenced by IBP’s OBI (2006-2015). The rentier nature of such economies makes them vulnerable to corruption and its attendant opacity in the reporting of revenues from mineral sales. Capital account

openness is positively correlated to fiscal transparency. The only known study that has investigated the nexus between capital account openness and fiscal transparency Tekeng and Sharaf (2015) found a positive nexus between both.

As expected, the practice of civil law is negatively correlated with fiscal transparency, corroborating works such as La Porta *et al*. (1999) which argued that the civil law administrations are associated with weak governance including corruption which mostly thrives better in an atmosphere of less transparency. Importantly, it can be observed that most of our key economic determinant variables do not hold a high pairwise correlation amongst each other. Of all our main economic variables of interest, only trade and kaopen2 have a modestly high correlation of 0.659. Both of them will not be used in the same model. Upon examination, our results from Table 6.2, give us no cause for concern of multicollinearity. However, the exact nature (causality) of these relationships can only be established via econometric estimations as correlations do not establish causality.

Table 7.1: Variables and definitions and source

Variable	Definitions	N	Mean	S.D.	Min.	Max.
ft	Fiscal Transparency – the degree of budget transparency ranging from 0 (complete lack of transparency) to 100 (full transparency)	104	32.33	23.53	0	92
Natres	Natural Resource Revenue as a percentage of GDP	104	15.44	12.93	1.37	58.037
Trade	Trade Openness measured as the sum of export and import as a ratio of GDP	104	71.97	28.30	19.1	179.12
Kaopen	Chinn-Ito's *de jure* measure of capital account openness, which considers the presence (or absence) of legal restrictions on capital transactions.	100	1.60	1.50	0.01	4.37
Kaopen2	*De facto* measure of capital account openness, which quantifies flows or stocks of foreign assets and/or liabilities.	100	113.13	91.36	42.10	661.11
Business	Business Disclosure – measures the extent to which private actors are protected via disclosure of their ownership and financial information.	100	5.02	1.93	0	8
Aidgdp	Total Aid received as a percentage of GDP	99	9.76	19.08	0.07	150.25
Growth	The growth rate (%) of GDP at market prices	104	5.73	3.97	-9.09	18.989
Popngrowth	The growth rate (%) of the number of people in a particular country	104	2.83	0.71	1.047	4.61
Inf	Inflation rate (%) year-on-year	103	8.387	6.05	-2.078	37.39
Ovbal	Overall Fiscal Balance as a percentage of GDP.	79	-2.00	5.81	-11.3	32.8
Debtservice	Debt Service as a percentage of GNI.	95	2.77	13.83	0.25	135.38
Civillaw	=1 if the legal origin of country is French, 0 if otherwise	104	0.44	0.50	0	1
Military	Number of military personnel as a percentage of total labour force	97	0.55	0.57	0.08	2.71

Source: Author's computation based on data from International Budget Partnership's Open Budget Index (OBI); Chin-Ito Index; Lane and Milesi-Feretti (2007) "External Wealth of Nations Mark II" database and the World Bank – World Development Indicators

Table 7.2: Correlation matrix of variables

	ft	Natres	Trade	Kaopen	Kaopen2	Business	Aidgdp	Growth	Popngrowth	Inf	lOvbal	Debtservice	Civillaw	Military
ft	1.000													
Natres	-0.406*	1.000												
Trade	-0.067	0.553*	1.000											
Kaopen	0.222*	0.025	0.145	1.000										
Kaopen2	0.135	0.321*	0.659*	0.353*	1.000									
Business	0.169	-0.114	0.189	-0.124	0.013	1.000								
Aidgdp	-0.099	0.255*	0.336*	0.280*	0.708*	-0.155	1.000							
Growth	-0.164	0.234*	0.006	0.054	-0.084	-0.105	0.072	1.000						
Popngrowth	-0.587*	0.512*	0.168	-0.036	-0.076	-0.226*	0.261*	0.131	1.000					
Inf	0.053	0.128	-0.045	0.033	0.025	-0.486*	0.086	-0.045	-0.051	1.000				
lOvbal	-0.275*	0.178	-0.108	0.070	-0.216	0.007	-0.105	0.026	0.025	-0.026	1.000			
Debtservice	-0.133	0.284*	0.480*	0.165	0.616*	-0.044	0.735*	0.059	0.229*	0.153	-0.093	1.000		
Civillaw	-0.597*	0.286*	0.089	-0.431*	-0.213*	0.314*	-0.088	0.057	0.493*	-0.399*	0.152	-0.072	1.000	
Military	-0.091	-0.045	0.116	-0.060	0.020	-0.195	-0.228*	0.035	-0.374*	0.270*	0.075	-0.048	-0.117	1.000

Source: Author's computation

Notes: *** significant at 1% level; ** significant at 5% level; and * significant at 10% level

7.6.3 Findings of the underlying economic drivers of fiscal transparency

In this sub-section we present our empirical findings and a robust discussion of the empirical findings from our cross-country regression. Our estimation results are presented in Table 6.3 below based on outputs derived from the dynamic panel data system GMM models. It is pertinent to point out that we have six models, each capturing an economic factor that constitutes the economic forces (our main variables of interest) driving fiscal transparency. However, sometimes economic factors can be somewhat correlated. Employing our main variables of interest individually in each model allows us to capture the near-exact impact (magnitude) of such variables on fiscal transparency, thus avoiding the possibility of overlapping impact.

From Table 7.3, the lag of our dependent variable (L.lft) is highly statistically significant at 1% level and positively associated with cotemporaneous levels of fiscal transparency in Africa in all the regression equations. Most crucially, as theoretically expected, the absolute value of the autoregressive parameter is less than one (1). This is an essential condition for a dynamic panel data model to be considered stationary (Blundell and Bond, 1998).

Table 7.3: Empirical results of the economic drivers of fiscal transparency

Dependent variable: Natural Log of Fiscal Transparency						
Explanatory Variables	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)
L.lft	0.663***	0.678***	0.783***	0.553***	0.733***	0.495***
	(0.061)	(0.096)	(0.052)	(0.056)	(0.101)	(0.048)
Military	0.201	0.070	0.311***	0.141	0.168	-0.138
	(0.117)	(0.128)	(0.103)	(0.210)	(0.139)	(0.163)
Growth	-0.045***	-0.047***	-0.026	-0.015	-0.035	-0.059***
	(0.014)	(0.014)	(0.021)	(0.022)	(0.021)	(0.019)
Popngrowth	0.593***	0.512**	0.327	0.711***	0.485**	0.538***
	(0.206)	(0.199)	(0.237)	(0.247)	(0.194)	(0.140)
Aidgdp	0.010***	0.011***	0.020***	0.010**	0.015***	0.006**
	(0.003)	(0.004)	(0.002)	(0.004)	(0.003)	(0.002)
Business	0.160**	0.134**	0.096	0.156**	0.145*	0.149**
	(0.056)	(0.056)	(0.076)	(0.072)	(0.070)	(0.060)
Civillaw	-0.569**	-0.444*	-0.141	-0.918***	-0.393	-0.762***
	(0.214)	(0.244)	(0.214)	(0.208)	(0.306)	(0.164)
ltrade	0.339***					
	(0.100)					
lkaopen		0.063				
		(0.046)				
lkaopen2			-0.188			
			(0.110)			
ldebtservices				0.368**		
				(0.137)		
lnatres					-0.038	
					(0.074)	
linf						0.055
						(0.052)

Constant	-2.300**	-0.529	0.311	-0.795	-0.809	0.113
	(0.868)	(0.835)	(1.182)	(1.093)	(0.942)	(0.812)
Observations	68	68	68	64	68	67
No. of Group	21	21	21	20	21	21
Country Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes
F-test	2018***	149.8***	706.5***	902.0***	4532.0***	552.6***
AR (1): (p-value)	0.174	0.145	0.148	0.130	0.137	0.227
AR (2): (p-value)	0.886	0.757	0.851	0.710	0.747	0.678
Hansen: (p-value)	0.333	0.332	0.327	0.293	0.223	0.258

Source: Author's computation

Notes: (a) *** p<0.01, ** p<0.05, * p<0.1 (99%, 95% and 90% significance levels respectively).
(b) Standard errors in parentheses.
(c) All estimations are undertaken in STATA 14.

Our empirical analysis reveals a positive relationship between debt service and fiscal transparency in SSA for our period of study. This relationship is significant at 1% and is in line with the hypothesised expectation. This may be attributed to the fact that countries with higher debts are more likely to come under the tutelage of international organisations such as the IMF which requires reforms of the fiscal frameworks especially, as it pertains to transparency in the management of public finances. Also. as highlighted by the World Bank's Public Expenditure and Financial Accountability (PEFA) framework (2016), high debt service costs will make governments unable to deliver planned services. This has implications for strategic allocation and distribution as some obligatory fiscal requirements such as investments in critical infrastructure, education and defence may not be met owing to the attendant decline in net government revenue resulting from increased debt servicing. Such a situation will lead to an increase in citizens' demand for more information (transparency) on how government finances are being managed. Essentially, as the government debt threshold increases owing to persistent prior deficits that were financed by debts, debt service will also increase and inadvertently expose government's inability to meet fiscal obligations especially for vital sectors such as education, health and defence. Such a decline in public services could trigger an increased demand for fiscal transparency in the management of public finances.

We had hypothesised a positive and significant expectation on the international trade openness–fiscal transparency nexus. In line with expectations, our empirical results show a highly significant and positive association between trade openness and fiscal transparency in SSA. Earlier studies by Tekeng and Sharaf (2015) focused on 27 developing countries. Their 2SLS models show the *a priori* expected positive results. This finding implies that improvements in trade liberalisation policies in African countries, characterised by greater trade openness policies, contributes towards a greater level of fiscal transparency. This presupposes that regional integration has led to greater trade in

Africa, which has been the case. As evidenced by AfDB (2016), intra-regional trade amongst African countries has risen from 9.18% in year 2000, to 13.80% in 2010 and subsequently 15.71% in 2014 (AfDB, 2016). This will enhance government revenue and contribute to an improvement in overall economic governance including fiscal transparency. However, there is room for improvement. As shown by AfDB (2016), other continental regional integrations in Europe, Asia and the Americas have higher intra-regional trade: this is a positive sign, especially as the region aspires to greater economic integration, and possibly a common market with the possibility of an economic union.

Our results have significant trade and fiscal implications. They indicate that such trade openness contributes to better fiscal transparency. Better fiscal transparency and possibly better fiscal outcome, connotes that trade openness could indirectly aid SSA countries to meet their EU-like Maastricht Treaty fiscal convergence criteria sought by such economic integrations. Gollwitzer (2010) buttressed a similar point; stressing that with the ambitions to transform the African Union into a common market and possibly into an economic union in the future, this will ease restrictions on the cross-border flow of capital and labour. As highlighted earlier, an improvement in fiscal transparency levels helps to achieve fiscal discipline, i.e. better fiscal outcome (debts and deficits). As African countries strive to achieve their regional convergence criteria (stipulated deficit and debt thresholds), improved fiscal transparency will help to reduce fiscal deficits and enable countries aspiring to join a regional economic arrangement to fulfil the convergence criterion which is essentially a regional requirement for fiscal discipline. With more African countries signing the African Continental Free Trade Agreement (ACFTA), this could see an improvement in SSA's intra-regional trade and the benefits therefrom.

In terms of the international financial openness–fiscal transparency nexus, we considered both the *de facto* (actual) as well as the *de jure* (formal-political) measure of capital account openness as earlier defined but in a separate model. Contrary to *a priori* expectations, our *de facto* measure of capital account openness has a negative and statistically insignificant relationship with fiscal transparency in SSA. This implies that financial liberalisation policies as they pertain to capital account openness have not contributed towards the enhancement of fiscal transparency in Africa for the period under consideration. Although our *de jure* measure of capital account openness presented a positive relationship with fiscal transparency, this was not statistically significant. The lack of significant empirical evidence of capital account openness contributing to fiscal transparency in Africa is not surprising, because most African countries' net capital outflow is negative due to the low level of financial sector development and increase in illicit capital flows. This exerts a negative influence on the exchange rate and government revenue.

Tekeng and Sharaf's (2015) study of developing countries employing the Chin-Ito *de jure* measure found a negative relationship between capital account openness and the index of fiscal transparency. However, employing the 2SLS and using the OBI measure of fiscal transparency, their empirical

study revealed a positive relationship between capital account openness and fiscal transparency, which was significant at 5%. In sum, there is no strong evidence of financial openness or financial liberalisation policies leading to improvements in fiscal transparency in SSA. As expected, our empirical studies revealed a positive relationship between inflation and fiscal transparency although the result was not significant at the conventional 5%. As posited, an increase in inflation rates increases anxiety in the general management of the economy and consequently increases demand for transparent reforms in fiscal and macroeconomic management of the country. Our positive findings are similar to findings by Andreula *et al.* (2009) and Andreula and Chong (2016). However, it is important to point out that the studies of both Andreula *et al.* (2009) and Andreula and Chong (2016) are based on a larger sample of size of over 80 developed and developing countries and the relationship from their studies were significant at the conventional 5%.

Interestingly, our empirical study reveals a negative relationship between natural resources and fiscal transparency. However, this relationship is not statistically significant. Ross (2011) and Khagram *et al*. (2013) found a negative connection between mineral resource wealth and fiscal transparency. Khagram *et al.* (2013) attributed this negative relationship to the allure of power, suggesting that oil wealth increases the value of staying in power and hence causes dictators to reduce transparency, hiding their government's corruption and inefficiencies. A similar argument was advanced by Ross (2011) who found that oil wealth was correlated with lower levels of fiscal transparency. Consistent with *a priori* expectations, aid as a percentage of GDP entered our models as having a positive and statistically significant relationship with fiscal transparency.

From the foregoing literature, it has been argued that aid can serve as an international economic and political instrument for fostering improvements in fiscal transparency. Our result is hence in consonance with Drummond (2011) and IBP (2013). Both argued for improved transparency in all national budgets, including payments from extractive companies, without which progressive nations should stop giving aid to governments which obscure budgets from their citizens. IBP's (2010) Open Budget Survey (OBS) discovered that in some cases, external pressure from donors made recipient governments improve their level of budget transparency. An IBP (2010) study recommended the incentivisation of aid to beneficiary countries in ways that improve budget transparency in recipient countries. Epstein (2011) underscored the importance of donor countries' insistence on improved fiscal transparency on the part of aid recipient countries as a precondition for future aid from donor countries. Both the US State Department and their UK equivalent, UKAid, acknowledged the need for budget transparency and accountability as critical to sustainable development and as such adopted as requirements for support to recipient countries.

From our empirical analysis, Business disclosure enters the empirical models as positive and significant as expected in almost all instances of our specifications. This new and still evolving literature was first tested by Tekeng and Sharaf (2015), whose study on 27 developing countries

found a positive relationship between business disclosure and fiscal transparency. Contrary to *a priori* expectations, the extent of militarisation did not yield the expected negative association with fiscal transparency in most of our models and was not significant. Most developing countries with larger than necessary armed forces have been connected with repressive and less than transparent regimes. In such regimes, civil society's effort to hold governments accountable is limited. A plausible explanation for why the military control variable yielded the opposite result from expectations may be attributed to the fact that when considering the influence of economic factors (non-institutional or political factors) on fiscal transparency in Africa, the influence of economic factors such as debt service, trade and the opacity surrounding the reporting of revenue from natural resources far outweighs the role of the size of the military. Most SSA countries depend on minerals or commodity trade. Militarisation is measured as the number of military personal as a percentage of the total labour force of a country. Our findings are contrary to findings by Tekeng and Sharaf (2015)[34] which is the only empirical study that has examined this relationship. Under the highlighted circumstances, it may be easier to experience less transparency in terms of government fiscal processes. Such repressive predispositions could also hinder civil societies' efforts to hold the authorities accountable with the sole objective of achieving a greater degree of fiscal transparency.

As argued elsewhere in our study, a spike in SSA's population growth is anticipated to increase the pressure for judicious and transparent use of resources. Interestingly, in line with expectations, our results reveal a positive relationship between population growth and fiscal transparency in Africa as all our models yielded a positive relationship. Of the six models, five were statistically significant. Although SSA's population growth is positively related to its degree of fiscal transparency, an increased fiscal awareness campaign by effective CSOs that can sway voters' oversight function will educate the public on what to look out for when clamouring for transparency in the management of public finances. Such awareness could aid the increasing population to ask the appropriate questions that will improve SSA's fiscal transparency levels from the current performance. Such improvement in voters' fiscal awareness contributing to enhanced demand for fiscal transparency can help overcome the fiscal illusion theoretical arguments by Buchanan and Wagner (1977) and Alesina and Perotti (1996). Buchanan and Wagner best capture the population (loosely defined as voters) and fiscal transparency nexus. This theory opines that politicians generally prefer to be ambiguous (less transparent) and that uninformed or naïve voters will underestimate the cost of current and future public programmes, particularly when the budgets are not transparent.

We had hypothesised an ambivalent economic growth–fiscal transparency nexus. Specifically, we hypothesised that under an inclusive growth scenario, growth will yield an improvement in general well-being in the citizenry as they will become more knowledgeable of their rights and will be able to

[34] Their study comprised countries from 27 developing countries in Africa, Latin America and Asia. Only six SSA countries were included in the study.

seek more transparency in use of public funds. However, under the scenario of non-inclusive growth, the opposite will be the case. Economic growth entered our estimation with a negative sign in all our models. This was statistically significant in four out of six of our models. Our results hint at the possibility of non-inclusive growth in SSA with its attendant poor standard of living, including education, hence limiting the citizens' knowledge of their rights to demand greater transparency on how public finances are being managed.

The nexus between administrative heritage and the level of fiscal transparency in Africa was also investigated by our study. Our measure of administrative heritage is based on the legal systems practiced by individual African countries. We adopted the use of dummy variables where one (1) stood for countries where civil law is practiced and zero (0) for countries where common or other forms of legal tradition is applicable. For our empirical analysis, we choose civil law which has its origin in the French legal system as our preferred indicator variable for measure of administrative heritage. A pivotal study by La Porta *et al.* (1999) concluded that interventionist legal traditions predicated on civil law produces inferior government performance to those based on the British common law tradition. In line with *a priori* expectations and employing civil law as a measure of the impact of administrative heritage, our study revealed that civil law regimes in Africa are associated with lower levels of fiscal transparency. This result is statistically significant in four out of six of our models. Similar findings were recorded by Wehner and De Renzio (2013) albeit their results were not significant and their analysis was based on a global data set. Our findings corroborate the conclusions drawn by the seminal work by La Porta *et al*. Our findings are also similar to findings by Alt and Lassen (2006) which revealed that common law (the opposite of civil law) is associated with higher levels of fiscal transparency in OECD countries.

7.6.4 Post-estimation robustness checks

Finally, our post-estimation statistics presented alongside the results in Table 6.4 examined the models for the presence of serial correlation and for over-identification with a view to establishing the robustness of our models. To achieve this, we employed the Arellano and Bond and Sargan/Hansen tests for the presence of autocorrelation and over-identification respectively. Dynamic panel data introduces the condition of no correlation in the error term (Cameron and Trivedi, 2009). Arellano and Bond (1991) noted that to achieve unbiased estimations requires the absence of a second-order serial correlation of the error term. By design, the values for the error term could be serially correlated in the first order i.e. AR (1) could be statistically insignificant based on its p-values. However, and as an important rule, a second-order serial correlation will be a sign of misspecification. Hence, our expectation is that the prob of $AR(2)$ $(pr > z)$, where z connotes the standard normal distribution, will not be significant at the 5% level; thus validating the absence of serial autocorrelation in the errors (Labra and Torrecillas, 2018). The null and alternative hypotheses for the test are represented below:

a. **Null Hypothesis** $(\boldsymbol{H_0})$ **–** Autocorrelation does not exist in the model.
b. **Alternative Hypothesis** $(\boldsymbol{H_1})$ **–** Autocorrelation does exist in the model.

Rejection or failure to reject criteria

$$Prob > x^2 \geq 0.05\ (5\%)$$

The rejection rule stipulates that when the p-value $(pr > z)$ is higher than 0.05, the error terms are not serially correlated. The results of the AR (2-order) test for serial correlation, which is applied to the residuals in differences[35], fails to reject the null hypothesis for a second order serial correlation in all the estimated models as presented in Table 6.3. By and large our results satisfy the first part of the key assumptions of system GMM estimations by Arellano and Bond (1991) and Windmeijer (2005).

Likewise, from the Hansen –J statistics reported in Table 6.3, we fail to reject the null hypothesis[36] of the *Hansen* test for over-identification (i.e. the overall exogeneity of the instruments used in the GMM estimation) at the 5% level for all the estimated models. We test for validity of exclusion restrictions using the Hansen –J tests. This leads to our conclusion (failure to reject the null hypothesis) that our over-identification restrictions are also valid. The null and alternative hypotheses for the Hansen test are presented below as:

a. **Null Hypothesis** $(\boldsymbol{H_0})$ **–** All restrictions of over-identification are valid.
b. **Alternative Hypothesis** $(\boldsymbol{H_1})$ **–** All restrictions of over-identification are not valid.

Rejection or failure to reject criteria

$$Prob > x^2 \geq 0.05\ (5\%)$$

The rule stipulates that, if our obtained *p-value* $(pr > z)$ is ≥ 0.05, the instruments employed in the model are valid. Hence, over-identification does not exist. And hence there is no evidence to reject our null hypothesis (Baum, 2006). Roodman (2009) provides a perfect decision guide that where the probability is close to one (1), it implies that the asymptotic properties of the test have been applied and hence we must reject H_0. It is recommended that $P(x^2)$ should be in the range of $0.05 \leq P(x^2) < 0.8$. This will be at the optimal level to achieve a probability of $0.1 \leq (x^2) < 0.25$. Overall, the results of our Hansen test indicate that the instruments are valid and the results of our GMM estimation are reliable. Furthermore, we reported the two-step robust standard errors corrected for finite samples following Windmeijer (2005). Our results satisfy the key assumptions of system GMM estimations by Arellano and Bond (1991) and Windmeijer (2005). As such, our models can be described as appropriate models with which to situate a discussion on the economic determinants of fiscal

[35] To check for first-order serial correlation in levels, second-order correlation in differences is checked because for GMM estimator, first-order serial correlation is expected *a priori* in the residuals in differences. Not surprisingly, the AR (1-order) serial correlation test results, in most cases, reject the null hypothesis of no serial correlation at the 5% level.
[36] The null hypothesis (H_0) for the Hansen test is that all our over identification restrictions are valid. In other words, the null hypothesis has correct model specification and valid over-identifying restrictions.

transparency in SSA. Our empirical results confirm the influence of some economic factors on determining the level of fiscal transparency in Africa.

7.7 Concluding remarks and policy recommendations

Apart from institutional and political factors, recent literature points to the role of economic forces influencing the level of fiscal transparency. This paper has attempted to empirically establish the relationship between economic factors and fiscal transparency in the context of SSA. Our empirical findings confirm that economic factors such as trade openness, debt service and foreign aid positively and significantly influence the extent to which African countries are transparent in the management of public finances. Our empirical results also reveal positive connections between other economic factors such as population growth and business disclosure with fiscal transparency in Africa.

Conversely, and as expected, natural resource revenue and the practice of civil law were found to be negatively associated with fiscal transparency in SSA. Some policy recommendations can be drawn from our findings. First, the significant and positive trade openness–fiscal transparency nexus in Africa calls for greater trade liberalisation reform policies by African states. This will be a step in the right direction for a continent that seeks closer economic integration with adopted convergence criteria for fiscal policy management. Hence, it be beneficial if more African countries ratify the African Continental Free Trade Agreement (ACFTA). Given the significant positive relationship between foreign aid and fiscal transparency, it will be beneficial if international donor agencies sustain their current policy of tying receipt of foreign aid to improvements in levels of fiscal transparency of beneficiary countries. This conditionality could be extended to improvements in levels of business disclosure in African countries, given its positive relationship with fiscal transparency. Finally, given the negative relationship between natural resource revenue and fiscal transparency as revealed by our findings, more African countries need to embrace EITI's resource charter on the standards of reporting revenues from mineral sales. This will reduce the opacity surrounding the reporting of mineral revenues.

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CHAPTER 8
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

The broad objective of this thesis is to examine the performance of fiscal policy in sub-Saharan Africa (SSA) and to empirically establish the economic, political and institutional determinants of fiscal transparency. For over a decade, to address the problems of poor fiscal outcomes, most African states adopted some form of national and supranational fiscal rules but with minimal success. From various studies, fiscal transparency has been identified as a crucial controllable factor which must accompany fiscal rules if the government's objective of fiscal discipline is to be realised. African countries have shown a very high level of fiscal opacity (poor levels of fiscal transparency) as well as poor fiscal outcomes. Having established the concurrent poor fiscal outcome and fiscal transparency in Africa, irrespective of the presence of fiscal rules, and considering the importance of fiscal transparency towards achieving desired fiscal outcomes, our study embarked on empirical investigations of the drivers of fiscal transparency in SSA. Our motivation is also based on the fact that, despite Africa's poor fiscal policy performance and its attendant macroeconomic instability, no known study on Africa's public finance has tried to establish the controllable factor(s) influencing fiscal outcomes in Africa. This makes our study, as far as we know, the first rigorous empirical study on the drivers of fiscal transparency in Africa.

To achieve its overall objective, the thesis has been structured as a collection of essays. First, as a background study, the thesis examined the performance of fiscal policy outcomes in Africa against existing fiscal rules. Subsequently, the thesis sought to empirically establish the determinants of fiscal transparency, given its crucial role as a controllable factor that influences fiscal policy outcome. In line with prevailing discernible studies, this thesis was compartmentalised into investigating three distinct categories of drivers of fiscal transparency: institutional, political and economic factors. The study began by analysing the performance of fiscal policy in Africa vis-à-vis its operational fiscal rules and what may have led to the poor fiscal performance, especially in terms of deficits, debts and revenue, despite the presence of such fiscal rules. It also examined the level (or degree) of fiscal transparency in Africa.

The thesis makes unique contributions to the literature on fiscal outcome and fiscal transparency in three ways. First, it is the first known study that seeks to isolate the controllable factors influencing fiscal policy in Africa and to empirically investigate the determinants of such controllable factors. Whereas earlier studies (including Andreula *et al*., 2009; Wehner and De Renzio, 2013; Tekeng and

Sharaf, 2015; Andreula and Chong, 2016) focused on a mix of countries (developed and developing), this study is the first known study to focus exclusively on SSA countries. This is predicated on the fact that SSA is one of the regions that has suffered the most but received less research focus in terms of poor fiscal performance and the attendant macroeconomic instability, hence it constituted the bulk of the countries that received HIPC initiative relief. With the current rising trend of SSA's deficits and debts, findings from a study such as ours can contribute in preventing a return to pre-HIPC fiscal experiences in Africa.

Second, this study makes significant contributions in terms of the methodology employed for its analysis. It is the first known study to employ a dynamic panel data analysis in investigating the determinants of fiscal transparency. The dynamic panel data technique was employed because of its inherent advantages including overcoming all sources of endogeneity as well as overcoming the limitations associated with prior cross-sectional studies on the determinants of fiscal transparency as clearly elucidated in the methodology section of each empirical paper.

Lastly, and perhaps most importantly, the study introduced a new dimension to the discourse and controversies in public finance management, fiscal transparency and public accountability literature in Africa. It is the first known study to situate such a discourse within the framework of *principal-agency theory* and the budget process as a fiscal contract between the principal (the electorate or voters) and the agents (elected officials). In seeking to establish the determinants of fiscal transparency, this study aims, via establishing factors that influence fiscal transparency, to reduce information asymmetry between the electorate and the elected officials, and hence strengthen the electorate's capacity to demand public accountability. This will help to contribute to improved public accountability and fiscal outcomes in Africa.

8.2 Summary of key findings

In the face of numerous studies highlighting poor fiscal policy performance in Africa and thus the need for improved fiscal policy outcome, very little is known of the importance of fiscal transparency in achieving better fiscal outcome. Our first extensive chapter, Chapter 4, fills this literature gap. Using SSA data on fiscal rules monitor and open budget index (OBI) covering the period 2008-2018 obtained from the IMF and IBP respectively, findings from this chapter addressed the following research questions in Chapter 4: To what extent are fiscal policy outcomes determined by fiscal discipline (adherence to fiscal rules) in Africa? To what extent does fiscal transparency matter for fiscal outcomes? To our knowledge, there is no known extensive study focusing on these issues in the context of SSA. Our findings were established using virtual statistics such as graphs, tables and charts. Results from the background study (Chapter 4) of the thesis revealed a failure of fiscal rules to deliver better fiscal performance or outcome in Africa. Poor fiscal performance in terms of deficits,

debts and revenue persists, despite the presence of such fiscal rules. Our findings also revealed the presence of poor levels of fiscal transparency in Africa.

Having established the failure of fiscal rules to produce better fiscal outcomes in Africa as well as the presence of poor fiscal transparency in Africa, we proceeded to empirically investigate the various determinants of fiscal transparency. This is owing to the importance of fiscal transparency as an accompanying tool to fiscal rules if better fiscal outcomes are to be realised and the current poor level of fiscal transparency in Africa is to be reversed.

The first substantial chapter, Chapter 5, empirically established the institutional determinants of fiscal transparency. Findings from this chapter addressed the research question: What institutional factors drive fiscal transparency in Africa? Employing a dynamic panel data GMM technique with a view to overcoming all sources of endogeneity and the weaknesses of prior cross-sectional studies, this chapter contributes to the literature on the underlying institutional drivers of fiscal transparency particularly in SSA. The chapter provides insight with respect to developing reliable policy recommendations, based on institutional factors that could be used to improve fiscal transparency in Africa. It contributes to the literature in terms of scope and methodology as prior studies such as Andreula *et al*. (2009) and Andreula and Chong (2016) were mostly cross-sectional studies involving a global mixture of countries (developed and developing).

Results from our first empirical paper, Chapter 5, reveals that, collectively, institutional factors comprising rule of law, government effectiveness, citizens' voice and accountability, governments' regulatory quality, political stability and absence of violence and control of corruption, positively influence the level of fiscal transparency in Africa. However, when considered individually, only rule of law and government effectiveness significantly and positively influence fiscal transparency in Africa. This implies that an overall improvement in institutional governance indices will lead to an improvement in the level of fiscal transparency in Africa. However, when individual institutional indices are considered, not all the institutional factors positively influence fiscal transparency, thus confirming the findings of Andreula *et al.* (2009) and Andreula and Chong (2016) that improvements in aggregate institutional index are positively associated with fiscal transparency. Whereas the rule of law and government effectiveness were positively related to fiscal transparency, control of corruption, political stability, voice and accountability and regulatory quality did not yield the expected positive relationship with fiscal transparency. This implies that the influence of institutional governance factors on fiscal transparency is more positively impactful only when all of them are considered *pari passu.*

The underlying political factors (dynamics) driving fiscal transparency in SSA were examined in the second empirical chapter, Chapter 6. This chapter also used the dynamic GMM panel data estimator's technique due to its aforementioned advantages. Unlike Alt and Lassen (2006) and

Wehner and De Renzio (2013), amongst other novelties, this chapter contributes to the literature on fiscal transparency by being the first to empirically examine the relationship between the executive-legislative competitiveness (checks and balances) and fiscal transparency; the first to employ a measure of partisan fragmentation that captures the role of independent candidates, and more importantly, focuses exclusively on SSA countries. Findings from this chapter addressed the research question in Chapter 5: What political forces influence fiscal transparency in Africa? The empirical evidence revealed that both internal and external political factors influence fiscal transparency in Africa.

Specifically, the empirical findings of this chapter substantiate the notion that internal political forces such as partisanship (partisan fragmentation) and ethnic fractionalisation play a key role in determining the level of fiscal transparency in Africa. Interestingly, contrary to expectations, empirical evidence from Chapter 6 reveals the failure of the most important political instrument for public accountability (i.e. checks and balances) to enhance fiscal transparency and better public accountability in Africa. A plausible reason for this finding may be attributed to “the toe the party line syndrome” where party allegiance trumps democratic and institutional responsibilities, as is sometimes experienced in less developed democracies. This is also an indication of institutional and capacity weaknesses as loyalty to institutions or branches of government to which elected officials belong is supposed to trump party loyalty on issues of transparency and accountability.

Another key finding from this chapter is the role of independent candidature in the improvement of fiscal transparency in Africa. Factoring independent candidates into the measure of partisan fragmentation leads to an enhanced level of fiscal transparency in Africa. On external political influence, our result confirms the crucial role played by the conditionality of improvements in fiscal transparency attached to Africa’s receipt of foreign aid from donor agencies and their country of origin. This has significantly contributed to improvements in fiscal transparency in SSA in the last decade. Also, our findings indicate that *over militarisation* of the labour force, an indicator of a repressive government, is negatively associated with fiscal transparency in Africa. These results, though exclusively on SSA, lend weight to findings by Alt and Lassen (2006), Alt *et al*. (2006) and Wehner and De Renzio (2013) that political forces do sway fiscal transparency.

Our final substantial empirical chapter, Chapter 7, explores the emerging debate on the impact of economic forces on fiscal transparency in the context of African countries. The chapter makes contributions to the literature in terms of the scope, methodology and factors examined. It is the first time that the economic factors–fiscal transparency nexus is examined in the context of SSA and in the context of a dynamic panel data analysis. The chapter also contributed to literature by being the first known study to examine the influence of the different measures of capital account openness (*de facto* and *de jure*) on fiscal transparency. Prior studies such as Tekeng and Sharaf (2015) examined only the influence of the *de jure* measure of capital account openness on fiscal transparency.

Therefore, the empirical study seeks to address the main research question of Chapter 7: What macroeconomic factors affect fiscal transparency in Africa?

Empirical findings from Chapter 7 reveal that fiscal transparency in Africa is positively influenced by economic factors including the extent of trade openness, debt service, foreign aid and business disclosure. As expected, the study revealed a negative and significant association between natural resource revenue as a percentage of GDP and fiscal transparency. This is not surprising given the level of opacity surrounding the reporting of mineral revenues in mineral-rich countries. Our study also revealed that the practice of civil law is associated with lesser fiscal transparency in SSA. This finding lends support to findings by Wehner and De Renzio (2013) as well as the foundational study by La Porta *et al.* (1999) which argued that the interventionist legal traditions predicated on the practice of civil law produce lesser government performance on a range of indicators including corruption than those based on the British common law tradition. Whilst the *de jure* measure of capital account yields a positive but not significant association with fiscal transparency, the *de facto* measure yielded a negative but statistically insignificant nexus with fiscal transparency in Africa.

In summary, our findings corroborate the proposition that fiscal policy implementation and outcomes in Africa have been poor and that adopting fiscal rules alone as a policy towards realising better fiscal outcomes has not yielded the desired policy objective of sustainable fiscal deficits and debt thresholds. To return to a sustainable fiscal path, SSA countries need enforcement of its fiscal rules in combination with highly improved levels of fiscal transparency. Furthermore, findings from our study persuasively confirm the hypothesis that the level of fiscal transparency in Africa is influenced by institutional, political and economic factors. Thus, addressing the policy recommendations from our empirical papers in addition to the adopted fiscal rules could help African countries achieve their sustainable fiscal policy objectives.

8.3 Recommendations

In the context of our empirical findings, this thesis recommends some essential policy interventions that could help improve the level of fiscal transparency in Africa, which in turn could help achieve better fiscal outcomes. On the institutions–fiscal transparency relationship, there is a need for comprehensive institutional reforms involving all the stakeholders in the budget process. These reforms should cover all the six sub-indices of institutions (underscored in section 8.2) so as to achieve a significant increase in fiscal transparency.

On the political forces–fiscal transparency nexus, three key recommendations can be drawn from our findings. First, in addition to creating more space for multiparty politics in SSA, African countries should consider institutionalising the role of independent candidates in the electoral process. Such reform direction will offer the principals (the electorate) a range of choices as regards the best choice

of candidates on the basis of transparency in the management of public finances. This follows from evidence that when independent candidates are considered, partisan fragmentation holds a significant and positive relationship with fiscal transparency. This may be attributed to the fact that independent candidates are immune from the “toe the party line syndrome” that encourages opacity in the management of public finances. Also, the *fear of the unknown extent* of reforms that independent candidates may want to carry out could force the hands of the governing political parties to carry out fiscal transparency reforms so as to take the credit for such reforms, and manage the process and the extent of such reforms.

Secondly, there is also the need for capacity building for all arms of government that are involved in the budget process because they are the critical agents of proper checks and balances and hence public accountability. Manifestly, contrary to expectations, our measure of checks and balances (legislative-executive competitiveness) revealed a negative relationship with fiscal transparency. In ideal democracies, loyalty to party or toeing the party line, is restricted to party political and economic ideology as contained in party manifesto and does not mean surrendering the independence of an independent arm of government, the legislature to the executive or vice versa. The opportunity cost (the real cost) of such loss of independence is an increase in fiscal opacity (less fiscal transparency) with the attendant dire implications on the management of the entire economy including fiscal discipline.

Lastly, on the external political scene, given the established positive relationship between foreign aid and fiscal transparency in Africa, international donor agencies and major donor countries should sustain their current foreign policy of tying foreign aid to reforms such as improvements in fiscal transparency and political reforms as preconditions for aid of any form.

On the economic factors –fiscal transparency nexus in Africa, there is a need to reverse the negative influence of mineral revenues on fiscal transparency in Africa by institutionalising the precepts and resource charter of the Extractive Industry Transparency Initiatives (EITI), which sets the global standard for the good governance of oil, gas and mineral resources especially as it pertains to transparent reporting of revenues accruing from mineral wealth. This will address the opacity surrounding the reporting of mineral revenues in mineral-rich countries which forms the bulk of their foreign earnings. Also, the positive link between trade openness and fiscal transparency indicates that countries of the world are more willing to trade with countries that are more transparent in the management of their central government’s finances. This calls for greater trade liberalisation reforms policies by Africa. Reform policies that promote *intra-regional and extra-regional* trade openness will contribute to enhancing fiscal transparency, hence should be promoted. In particular, policies such as the African Continental Free Trade Agreement (ACFTA), which aims at fostering greater economic openness and integration, should be embraced by African countries that are yet to ratify and embrace it. Lastly, the positive impact of the extent of business disclosure in a country on fiscal

transparency suggests that extending the donor agencies' policy of tying foreign aid to improvements in fiscal transparency to include improvements in the level of business disclosure in Africa, could accelerate the improvement in fiscal transparency, better public accountability and service delivery in Africa.

8.4 Challenges and recommendations for future studies

One of the main challenges faced by this study is the paucity of fiscal transparency data for African countries. Open Budget Index (OBI) data have been published for over a decade, however, from available data employed in our study, despite the increase in the number of African countries that have signed up for the Open Government Partnership, some African countries are yet to take part in the IBP's Open Budget Survey (OBS). This reduces our sample size and gives room to statistical challenges such as less reliable variability of the standard deviation and under coverage bias. However, as evidenced by our unbalanced panel dataset, with each round of OBI survey conducted, one or two new African countries join the list of countries with fiscal transparency data. Thus, this may be completely addressed in the near future as this would give us a larger sample size in a few years' time and more reliable statistics can be derived.

In terms of recommendations for future research, as additional data become available in the near future, future empirical studies on the association between fiscal transparency and human development indices such as health, education and housing in SSA could be explored. The nexus between fiscal transparency and economic growth will also be a germane topic for examination.

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